

SOUTHERN TEXTILE BULLETIN

VOL. 32

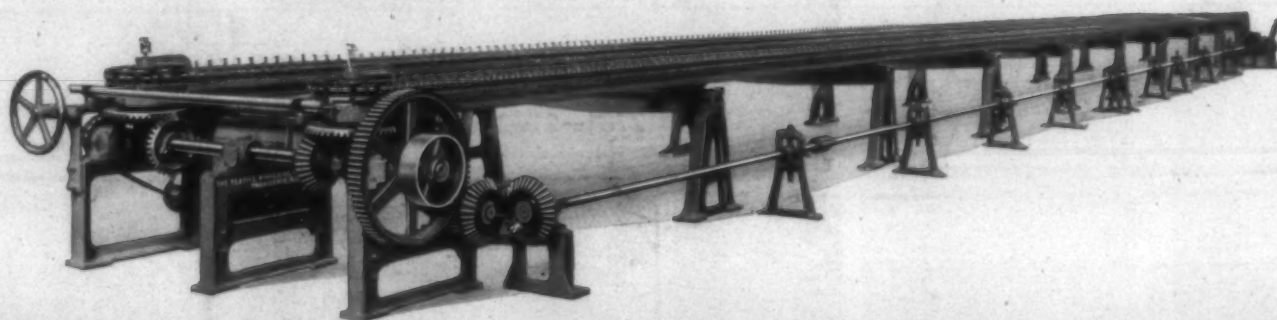
CHARLOTTE, N. C., THURSDAY, JULY 21, 1927

NUMBER 21

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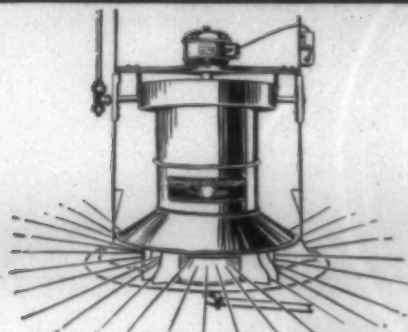
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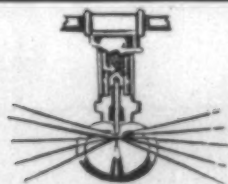


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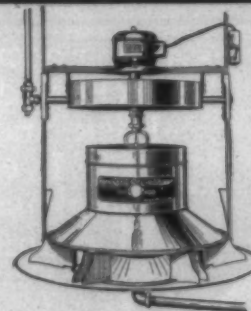
Less Power is Consumed... Much Less



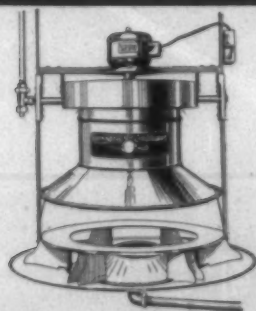
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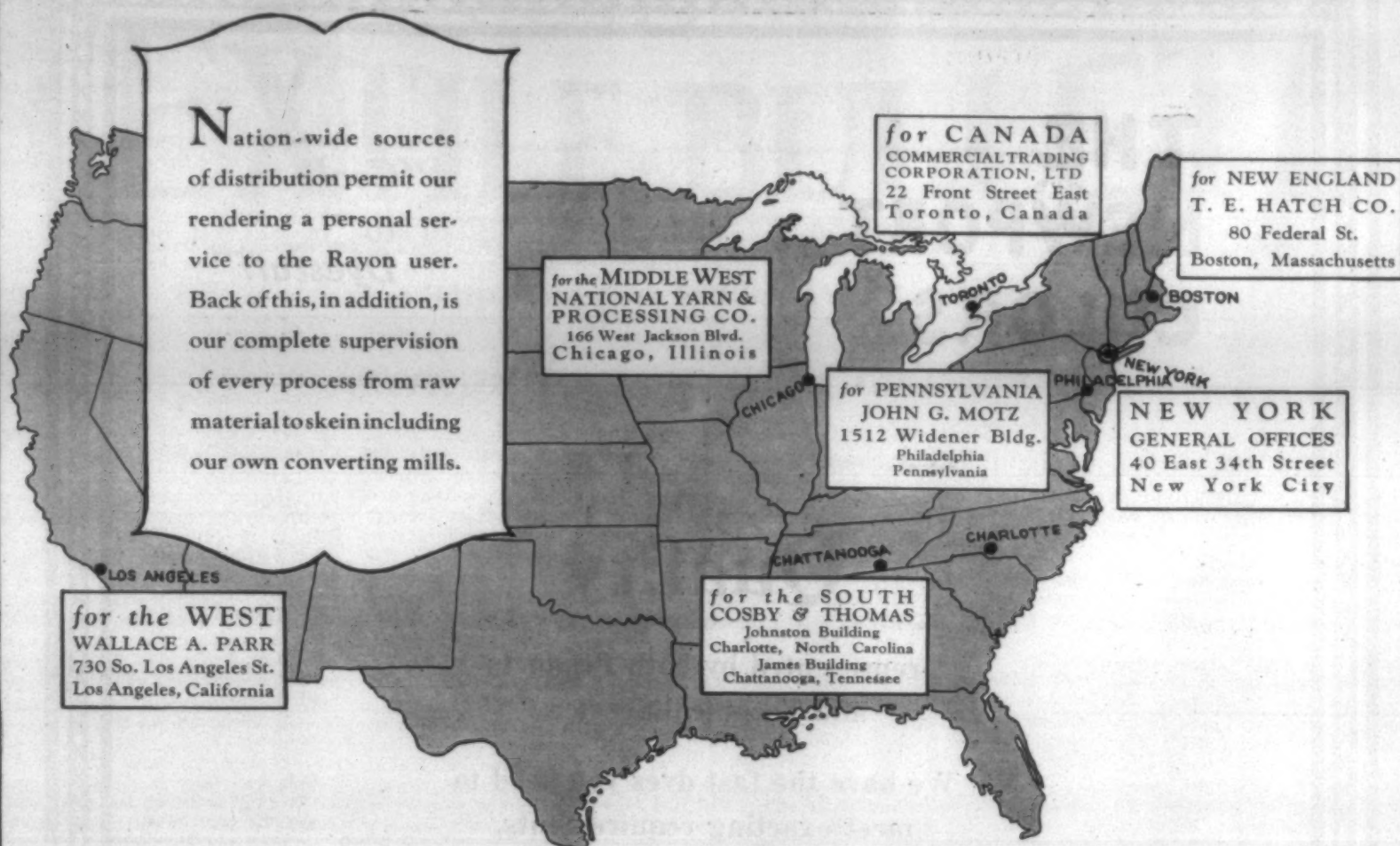
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American Export and Credit Practice

PRODUCTION of textile fabrics was begun in what are now the world's great textile manufacturing countries primarily to supply the needs of the home market, according to a special article by E. B. Filsinger, export manager of Lawrence & Co., New York, in the Manchester Guardian. The industry in all of these countries has progressed far beyond the requirements of the home market. The great producing countries to-day are great exporting countries. Not a single one of them is able to sell all its production at home.

Indeed, to some of them the export market is of vital importance, almost as vital to the welfare of the industry as the market at home. Capacity to produce has kept pace with the progress of the times, and is now on a plane that makes export trade increasingly essential to the prosperity of the industry in each of the great textile-producing countries. This situation will be intensified as time goes on.

The question of an improved position in export trade looms large in every producing country, and is receiving the closest attention. Lancashire is deeply concerned because Britain's export business is smaller than it was before the war. In the United States the need for enlarged export trade is becoming increasingly manifest. Despite large domestic consumption of fabrics, many American mills have been showing losses in their balance-sheets, and they are studying the export field for outlets which will permit them to utilize fully their immense productive capacity, thus restoring operation to a profitable basis.

The topic is a timely one in every textile-producing country, because export trade is going to be more important as a success factor, and with its increasing importance there will come still keener competition.

At present the United States has export markets for only about 5 or 6 per cent of its total production of textile fabrics. The factors in this export trade will, no doubt, be of interest. They are (a) mills which sell direct to foreign markets, (b) mills which sell through so-called export commission houses, (c) converters, (d) export houses, (e) wholesale distributors, and (f) textile export merchants.

Some of the larger converters sell direct to foreign markets; others do

partly through export houses, and there are others which do all their foreign business through export commission-houses. Some of the export houses do converting on their own account and also buy goods to sell direct to the foreign trade. Converting involves the purchase of the grey cloth and its printing, dyeing, and finishing by firms specializing in these processes.

There are certain wholesale distributors in New York, New Orleans, Chicago, St. Louis, and San Francisco who conduct an export business based on shipments of goods to retailers in countries close to the United States. The textile export merchants are a group who handle export business exclusively. They operate on a basis of buying and selling outright. They buy goods in large quantities for resale abroad, or they may perhaps arrange with a mill to confine production of certain lines of goods to them. They carry stocks and make shipments on order.

These are the factors which have entered into the development of the export trade since the establishment of the textile industry in the United States more than 100 years ago. A point of great interest is that ship-owners were the pioneers in the development of the trade. They were traders as well as shipowners, and they took the first sheetings and grey cloths to the Far East in business ventures of their own. The cloths were then known as "cabots," and the name is encountered in Asia and the Far East to the present day.

As these Yankee shipowners of New Bedford and Salem prospered they began to invest in the textile mills whose goods they sold. In their trading operations they acquired the merchandising instinct. They put their merchandising brains, as well as their money, into the mills. Many of them set up mills to make the goods they wanted. Others advanced money and bought raw cotton for mills, took the finished products, sold them abroad, and made settlement yearly with the mills. This was the origin of the textile commission, or "selling," house in the American textile industry which survives to the present day.

Naturally, the close identification of the Yankee shipowners with the textile industry resulted in a concentration of the mills in New Eng-

land. It was after the Civil War, and coincident with the development of the automatic machinery, that the industry began to be largely established in the South.

The functions performed by the various factors in the American export trade are sharply defined. Export commission-houses, by reason of their technical knowledge and experience, have been able to serve mills not thus qualified to conduct export business for themselves. The commission-house was prepared to finance the foreign buyer within reasonable limits. It made a charge for this service, and also charged a buying commission.

The world war interfered to a considerable extent with the business of export commission-houses—not the interference inevitable because of war dislocation of trade, but that introduced by the greater opportunity of the mills to do direct selling. With usual sources of supply largely cut off there was an increased demand in foreign markets for American textiles, and the mills began to take a greater interest in direct trade, particularly since the merchant abroad showed a desire to buy direct and save the commission.

Today direct selling is on the increase, and the amount of business going through the export commission-houses is declining. This is helping the American industry to obtain a better grounding in export trade and to become more efficient. The majority of export commission-houses, most of whom are located in New York, buy through export brokers, who handle a great variety of lines and also relieve the commission-houses of details in dealing with the mills. An export business of some importance on a small lot basis is done by mail-order houses direct to consumers.

Huge domestic demand has, up to the present, been a retarding influence on the development of American export trade. Naturally, with the domestic market absorbing so much of the production the export market did not in the past receive the attention that is being given to it today.

However, now that need for a larger export trade is thoroughly realized the more important firms have begun to visualize the possibilities that are open to them. As a consequence there are units of the industry that are setting out to do as thorough a job in foreign selling

as is done at home. An intensive study of the field is being made in order more adequately to meet foreign requirements and to become fitted to compete with the whole world.

Market Research.

An increasing number of manufacturers are really endeavoring to ascertain just what the foreign markets want, and are trying to supply these needs. This is true not only as regards patterns and colorings but particularly with respect to the construction of cloths to meet certain tariff regulations. The export department of one of the largest cotton textile groups in the United States is now on an equity with its domestic merchandising departments, and it is permitted to add particular styles, patterns, or colors to domestic lines which may be saleable abroad. In addition, the export department can create its own fabrics when these are needed. In the case of foreign manufacturers, especially those of England, Italy, France, etc., this has, of course, long been the policy; it is only recently, however, that this method has been adopted in the United States.

In considering export practice to-day the American industry is taking into account many influences which are at work the world over. The American manufacturer has several factors which are undoubtedly working in his favor. For instance, American moving pictures are a subtle influence abroad. They are doing much to popularize modern styles of dress, furnishings, etc. Whether or not "jazz" is music, it has vibrated to the ends of the earth. It is unquestionably easing the way for further acceptance of modern modes and customs.

Another point that is of interest. The American textile producers, just as those in other countries, have certain opportunities for styling goods for export trade. The whole world is drawn on motifs. American manufacturers are no longer mere copyists, they often improve on borrowed originals, and are likewise progressing rapidly in a creative way. For that reason peculiarly American designs are finding increasing favor abroad. They are liked because they are different from those offered by other countries. They tend to supplement, if not necessarily replace, cloths man-

(Continued on Page 29)

Textile Mill Power Problems

POWER transmission has been and is of greater importance to the textile mill than is commonly supposed. Improvement in methods of transmitting power has caused radical changes in textile mill design and arrangement. Thus before the advent of electric transmission some mills were grouped around the power station in a more or less circular form so that power could be transmitted to the buildings efficiently by rope or belt. Today textile mills are located wherever most convenient or most advantageous for routing, handling, shipping, etc. The distance of the building or floor from the power station is of little importance. Even the type of building itself is sometimes influenced by the mode of transmission, says an article in "Black and White," published by E. F. Houghton & Co.

Because of the unquestioned improvements incidental to electrical transmission the careless statement is often made that belt transmission is doomed. But that statement is far from the truth. The foremost electrical and mechanical power transmission engineers of today agree that belt transmission holds an important place in the textile field and according to present indications belting will always be used in textile mills.

In machine shops and similar industries where overhead cranes are used to handle the heavy work, overhead belting presents a decided disadvantage. That is one of the reasons why the individual motor has made such rapid headway in shops of this type. But in textile mills where work is not heavy, this argument against overhead belting does not exist.

Again, in industries where machines are large, each machine requiring a motor of 50 or 100 h.p. or more, as in the cement making industry, the individual motor drive is giving such excellent results, that most modern cement mills are now entirely individual drive. They are even eliminating intermediate mechanical speed reduction and are driving grinding mills by synchronous motors, either of the self-starting type or of the standard type with magnetic clutches.

But in textile mills individual motor drive is not always best. Neither is group driving always best. And the same is true of exclusively mechanical transmission. There is, always, a most economical method—usually a combination of electric and belt drive. Sometimes individual motor driving will be found most profitable on the large machines, sometimes all machines should be belt driven, and sometimes group driving will be found to give best results. Nobody can state definitely which is best. Each special case requires treatment all its own, just as though one were determining the kind of power to use—steam, gas, water or electric. Prof. Norman, in his recent book, "Principles of Machine Design," says:

"On the whole, electric drive is less efficient than individual belt

drive, although the power consumed by idling shafting is a very serious item in many cases."

For winding, warping, beaming, quilling and similar machines that require so little power, group electric drive is usually preferable from the standpoint of power economy. Individual electric drive may "look" better, but owing to the small amount of power consumed by most machines of power consumed by most machines in textile mills and the low efficiencies of small motors, it is sometimes found best to install only one large motor in each mill, distributing the power from that motor to all of the machines in the building. The size of the motor should be such that when all machines are operating, the motor will be fully loaded. Efficiency will then be at maximum. From the single motor, the power to the machines should be distributed by belt. Another method is to put a motor on each line shaft, distributing power from that shaft to the machines throughout the building. But where it is likely that all machines will be operated continuously, the annual cost of power with this arrangement is generally greater than where a single large motor is used for the entire room. For continuous operation of all machines, individual motors of small power on each machine usually result in the highest cost per year.

In general, electric drive is advantageously applied under the following conditions:

1. On portable machines it is usually a great convenience regardless of the size of the motor or the percentage of load. It seldom pays to belt machines that are moved frequently.

2. Where the machines operate at full load steadily or most of the time and where satisfactory belt drive is impossible.

3. Where speeds are too high for efficient or economical belt drive, 5,000 feet per minute is the generally accepted maximum speed for belts.

Where machines are fixed, group drives driven from a common motor or from a line shaft is advantageous. Most textile mill machines are fixed.

This is true not only of the textile industry, but of nearly all industries. The portableness of the electric motor, and the ease and safety with which it can be installed at any point in the plant, have in numerous instances been the cause of radical changes in shop design and arrangement.

There are mills today in which both the old and the new methods of transmission may be seen side by side. It takes time for new methods to take root. The inertia of old practices is difficult to overcome. Besides, the expenditure necessary to wipe out old methods and change to new may be prohibitive. Owing to the cost of alterations and replacements, old mills often have difficulty in competing with new mills and the lower production costs

of the latter. The problem of modernizing old mills is vastly different from that of designing a wholly new mill. To arrive at a satisfactory solution of the old mill problem is not easy.

Seldom if ever are two textile mill drive problems exactly alike. Each individual mill must be analyzed thoroughly before a positive statement can be made as to which type of drive will be most economical. It behooves the designing engineer to be open-minded and give consideration to every promising method, whether or not it is a so-called "modern" method. What the textile mill owner wants is—maximum income per dollar invested. Economical transmission will swell the income while expensive transmission will cause it to diminish. Thus in old mills it may be found advantageous to change to electric group drive in the distant portions of the mill and in the distant buildings, but to retain mechanical transmission in those portions close to the source of power.

When a mill is largely or partly shut down with only one floor or one building operating, an advantage of electrical transmission is that power may often be purchased from an outside central power station, and the power plant of the mill itself may be shut down. It is possible to compute the exact point at which it pays to shut down the mill plant and operate on purchased power.

The question of fire hazard is shared about equally by the electrical and belt methods. Sparks and hot wires have both been causes of fires, but so have hot boxes in shaft transmission and sparks from belts due to static electricity.

There should be no difference in quality of product, whether the drive is electric or mechanical. When properly designed and installed, both do their work well.

Where motors are operated at full load continuously, or where they are overloaded, the danger of burn-outs is ever present. Just recently some figures came into the writer's possession concerning a factory in which nearly 5,000 electric motors are operated—the total power consumption being slightly over 40,000 h.p. To be exact, the average of each motor is figured as 8.92 h.p. The statement shows that they average over 100 burn-outs every year. The total cost of re-winding the motors is given, making it possible to figure that each burn-out costs \$83.80. To this cost of burn-outs must be added the cost of holding up production, and the cost of idle labor during the breakdown period. In the smaller mills not equipped for rewinding burned out motors the cost per burn-out is probably greater than \$83.80.

A motor on a loom must be large enough not only to handle the average load, but it must be able to handle the maximum or peak load. This is true of any machine, whether it be electrically or belt driven. Belt drives must be designed so that they are capable of handling starting and

other high loads, as well as the average load.

In discussing a paper on "Power for Textile mills," before a recent meeting of the American Society of Mechanical Engineers, the manager of the textile division of a large manufactory of electric machinery said, "In selecting motors for individual drive it is highly important that a large enough size be purchased to meet the maximum demand that might ever be imposed on the loom."

That is what makes the all-electrical problem so difficult and is the reason why a group drive, with high grade belts, is usually better. To install an excessively large motor on each loom is not good engineering practice, so long as something better is obtainable.

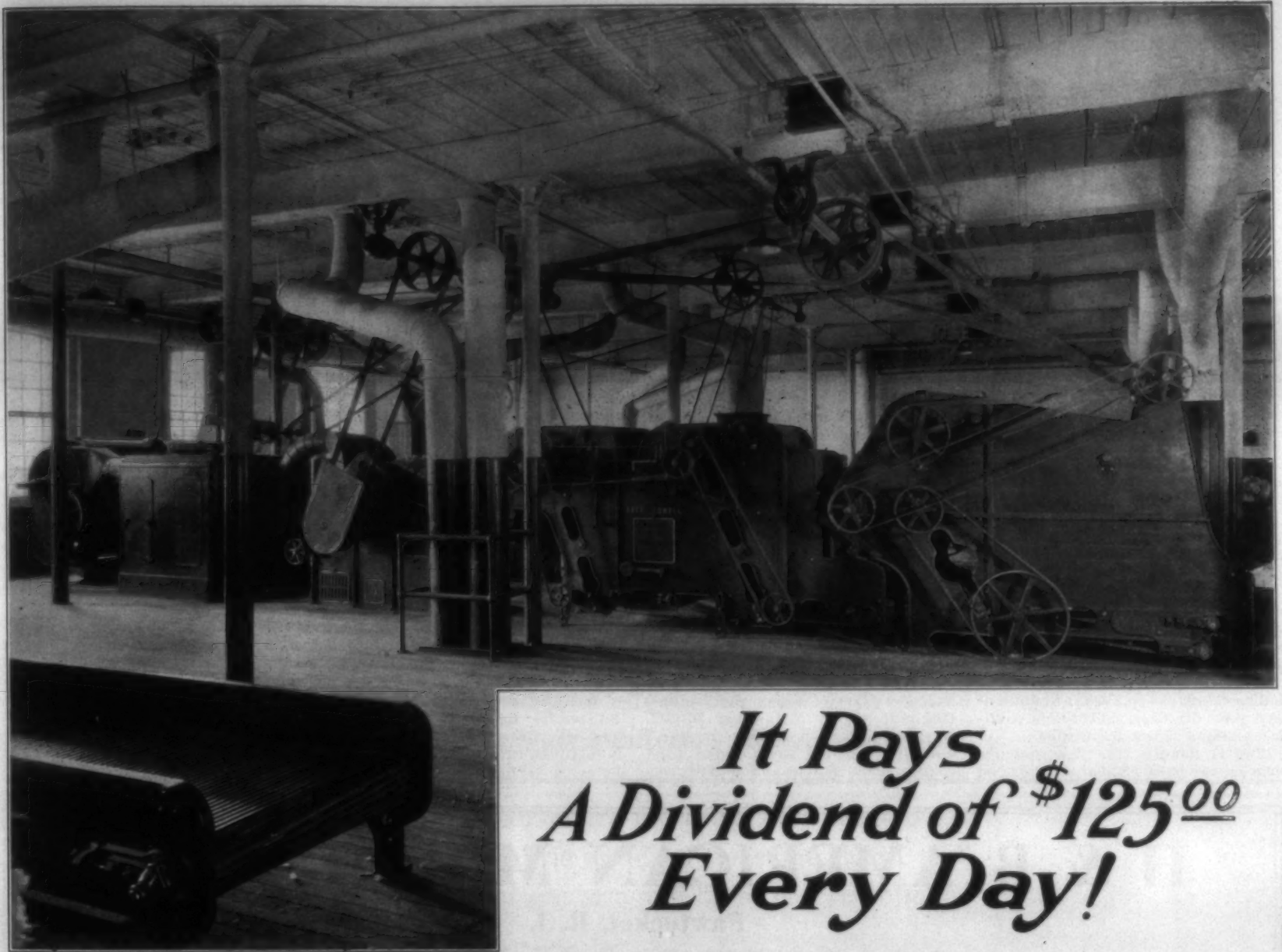
Not long ago an article appeared entitled, "The Folly of Getting Undersized Motors," in which the writer said: "We made the usual mistake when we motorized our plant. We didn't get an engine-generator set large enough to take care of additional machines and allowed a smooth-talking salesman to sell us undersize motors." If you are planning now to electrify your mill be sure to get an electric generator that is large enough. Remember, though, that the generators and motors must not be too large. The greater the oversize the more inefficient they are and the more wasteful.

One can attach a tremendously large motor to almost any machine and it will "make the wheels go." But if the load is only intermittent, of a variable character, with a high peak, the load factor will be low and the cost of operation high. In a similar way it is possible to install needlessly large pulleys and belts, but the pulley and belt have an important advantage in the matter of load factor and power factor. Underloaded belt drive is usually much more efficient than underloaded electric drive.

Before deciding upon electric motors vs. belt transmission on important drives it is usually worth while to investigate both efficiency and power factor. For instance, the efficiency of a 5 h.p., 36000 r.p.m. motor is only about 65 per cent when operated at 30 per cent full load. Power factor, also, is low. This makes it expensive to drive a machine containing a number of small motors. A single electric motor, with belt distribution, will give much higher efficiency, and if properly belted, should operate satisfactorily.

One of the former disadvantages of belt transmission was that in order to run a portion of a mill, it was customary to operate all of the line shafts over the idle portion of the mill as well as over the portion that was loaded. This resulted in a serious loss of power. However, by judicious application of friction clutches, in accordance with modern methods, most of these losses may be eliminated. Electrical power has

(Continued on Page 29)



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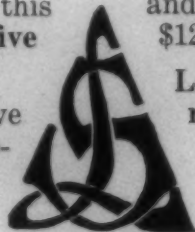
As they open 12,500 pounds per ten hours, this saving amounts to **one hundred and twenty-five dollars a day.**

The initial investment was slightly over five thousand dollars, and consisted of the equip-

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Cotton Consumption Higher

Cotton consumption in June aggregated 662,630 bales, the highest June on record, it is shown by figures announced by the Census Bureau. Consumption in June, 1926, was 518,607 bales. Both cotton growing States and New England shared in this increase.

Cotton on hand June 30 was 1,607,676 bales in consuming establishments, compared to 1,268,707 a year ago, and in public storage and at compresses 2,164,108 bales compared to 2,410,261 on June 30, 1926.

These figures include 26,069 Egyptian, 6,655 other foreign, and 1,299 American Egyptian consumed; 57,728 Egyptian, 18,418 other foreign and 4,842 American-Egyptian in consuming establishments; and 14,721 Egyptian, 6,332 other foreign and 2,213 American-Egyptian in public storage.

For the 11 months ended with June, consumption aggregates 6,633,474 bales this year compared to 5,994,109 in the corresponding period last year.

Cotton spindles active during June aggregated 32,753,428 compared to 31,755,874 in June, 1926, the report shows. Both sections also participated in this increase.

Exports last month were 481,943 bales, compared to 346,533 in June of last year, all major consuming countries taking larger quantities.

For 11 months this year, exports aggregated 4,794,580 bales compared

to 7,788,848 in the corresponding period last year.

Imports in June were 36,055 bales compared to 22,137 in June of last year. The principal increase was in Egyptian, although China also sent more cotton last month. Receipts of Indian cotton decreased.

Grey Goods Prices Higher

The general trend of cotton gray cloth prices during the first half of the present year has been upward in both the New York and Manchester markets, although there have been minor recessions and recoveries, it is pointed out by the textile division of the Department of Commerce in a report on its compilation of international cotton gray cloth prices.

During the first half of 1927, the prices of representative cotton gray cloth in the New York market averaged about three-eighths of a cent per pound above the Manchester quotations for comparable British cloths. During the period under discussion, New York quotations averaged \$0.3522 per pound, or \$0.057 less than during the first six months of 1926. During the first half of 1927 Manchester prices averaged \$0.3488 per pound, or approximately \$0.05 lower than in the corresponding period of 1926.

At the beginning of the year the average price of seven representative cotton gray cloths was \$0.3367 in New York and \$0.3274 in Manchester. For the week ended July 2, they were \$0.3718 and \$0.3691, respectively.

The maximum price was registered during the weeks of June 4 and 11 in Manchester and for the weeks of June 25 and July 2 in New York.

Selling Methods Are Changing

"The machinery of distribution in its old form has failed to meet the present demands of the country," John S. Lawrence, president of the New England Council told a group of 50 hosiery wholesalers from various sections of the country who met with executives of the Ipswich Mills at Ipswich, Providence.

S. T. Breyer of San Francisco, grand councillor of the United Travellers' Association of America, was among the wholesalers who addressed the gathering and discussed the problems of the wholesaler in their relationship to production.

Treasurer Auguste Richard of Ipswich Mills discussed the relationship of the customer to the factory and the factory problem of the control of the supply of hosiery. Leonard Kleeb, agent of the mill was among the other speakers.

"The old method of production against advance order on the part of the wholesaler, permitting of mass production and mass distribution, has gone for good," continued Mr. Lawrence.

"We find competitor catering to the public demands through the door-bell ringers, catering to groups of retailers, catering to chain stores. Competitors' financial statements in-

dicate that many of them have been extremely successful in so doing.

"We criticize the door bell ringing method but it has brought to the home a brand new line of colors, a selection of dresses and the latest style of product from the factory, at prices that are low. We criticize syndicate buying but that has brought the public cheaper goods and to the factory mass production, together with the best style advice.

"So you see each of these methods has provided something that the old methods lacked or failed to provide in meeting new conditions but I feel confident your method is capable of being so evolved as to successfully meet most of these new methods. The primary factors of this evolution are better trade relationship and the elimination of waste.

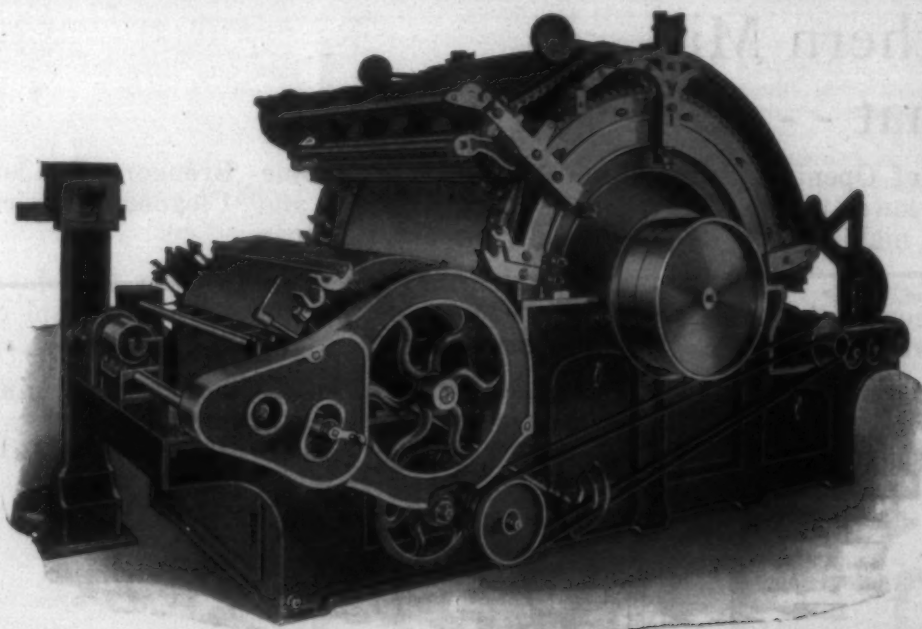
"I believe there must exist between the manufacturer, wholesaler and retailer such confidence as to permit the coordinating of stock control to the end that collectively styles might be selected, might be stocked, and standardized; that the replacement of the stocks must be made automatic and flow quickly from the machine that produces them to the persons foot.

"We can get together on major undertakings. We must develop some closer working agreement with our customers and appreciate that a steady flow of merchandise kept on the move cuts cost of production and of distribution, renders better service and after all profits come from good service to the public.

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Do you realize the cross-dyeing possibilities of Celanese-and-Silk mixtures in Crepe-de-Chines?

MANY new and attractive fabrics can be produced by using warps of Celanese and filling of pure silk. These fabrics are *really new* fabrics and therefore find a ready and profitable market.

With the same "grey" construction, a vast range of color combinations with bright or dull finishes can be obtained.

In the two-tone effect, the face is dyed one color and the back a different color. A bright or dull finish can be obtained in the process of dyeing.

If solid colors are required, the face and the back of the fabric are dyed the same shade, and, similarly, a bright or a dull finish can be obtained as desired.

Celanese brand yarn is highly elastic and remarkably durable; and it has unique hygienic qualities. The dyestuffs used for dyeing Celanese brand fabrics give colors that are unusually fast to sun, suds, salt-water and perspiration.

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High Drafting

3 plants

One Plant backs another

In Duplan manifold service for the Rayon Weaving Industry, each plant backs the others in a stern, concentrated effort to surpass in each separate undertaking.

Behind this conscientious effort are years of manufacturing success during which the name, DUPLAN, has steadily grown in significance to mill men intent on securing a continuous output of converted yarns . . . excelling and unvarying in quality.

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DUPLAN

THE following information on high drafting, or long draft on spinning is taken from a lecture by Benjamin Robinson before a meeting of the British Association of Managers of Textile Works.

The question of the application of high drafting to cotton spinning has been with us for a long time now. The first proposals in this direction I have been able to find were in an American patent granted to a Mr. Fuller in 1868. The points mentioned in his invention or patent are described as "pull through" system, obtained by a close adjustment between middle and delivery roller by the aid of a light middle pressure roller. The latter was a wooden roller weighing about 70 grammes, covered with leather and used for middle roller. Another case I remember, in 1902, was high drafting applied to a slubber frame in order to dispense with the intermediate frame, but it never went further than a few frames.

Coming to more recent applications, Casablanca took out his patent in 1912. Following close upon that patent were several Continental patents: Cesoni-Lerussi, 1914; Giladoni, 1914; Jannink, in 1915. Again the application of close setting and light middle roller is universally adopted in the finer branches of the trade, and all manner of rollers in weight, material and finish, have been experimented with to obtain the best results, and drafts from 15 to 20 have been common for a long period in certain branches of this trade. The principal features of any high draft systems are devices by which the roving, being drawn, may be controlled up to a point much closer to the nip of the front rollers than is usually the case in ordinary drafting rollers.

These may be classified in three groups:

(1) Those employing leather aprons: — Casablanco, Vanni and Roth-Le Blan, employing some form of elastic, pliable material, which changeable, subject to wear and tear and dirt accumulators.

(2) Those in which there are three bottom rollers, on the middle one of which there may be either one or two top rollers, varying in size weight and material, examples of which are: Cesoni-Lerussi, Jannink, Giladoni, Gibello, Pottendorf, Asa Lees, Tattersalls, Otto Latch, Wild and Johannsen. These varieties are different only in detail in regard to size, weight and structure of middle rollers.

(3) Those having an auxiliary line of small diameter rollers placed between normal middle line and the front rollers or the four line of rollers system.

The examples are: (Platts) C. L. S.; Howard and Bullough Toennissen & Serra's. Then we have the Hetherington combination of intermediate and roving. This consists of two sets of drawing rollers on the same roller beam—(1) weighted by springs: (2) weighted ordinarily with a false twister between each set. Another form is the Ferrand system, which consists of three heights of single rollers above the

ordinary drawing rollers. Whatever form is adopted, the principle of drafting is the same, and is governed by the resistance to drafting and control of fibres during the elongation process.

The resistance to drafting can be proved by the calculated versus actual speed of top and bottom rollers, with material being acted upon and the same with material removed.

This has an important bearing on three line versus four line of draft rollers. Experimenters in all cases have found that the weight of a plain auxiliary top roller cannot be decreased without limit, since below a certain minimum the rotation of the top roller ceases to depend on that of the bottom roller, but rather on the pulling of the hairs from beneath it. This uncontrolled rotary impulse is imparted to the roller and irregularities of turning result.

The weight of roller will depend largely upon the roller settings and form of roller weight of material being treated and class of cotton being used.

Tests Examined.

Let us examine some of the results of tests of high drafting in this country that have been carried out:

(1) Reduced, the hank roving from 6 hank to 4 hank, and obtained a better yarn. 36's T. from American D.R. got more weight from card room and more spy spindles.

(2) Dispensed with roving frame, but later reintroduced it, spinning 30's T. single roving—not satisfied with yarn in first case.

(3) Reduced from 5 hank to 2½ hank double roving, using a good quality of American cotton, and, quite satisfied the quality was maintained, extended the plant, and hoped to convert all mill.

(4) Using a good quality of American cotton, double roving, and obtaining quite satisfactory results.

(5) Spinning American cotton 36's, dispensed with interms., but double roving at ring frame—satisfactory results.

(6) Increased slubber hank to 1 hank and spun from slubber bobbin. 3½ hank previously did not quite seem convinced of change (some spun from drawing sliver).

(7) High draft roller system and single roving, but gone back to low drafts, and find an improvement in quality of yarn.

(8) Same as (7). Discarded on account of piecings and breakages, but found advantage from high draft system.

(9) Five counts 60's T. tried without roving, but went back and adopted coarser roving, 10 hank to 5 hank, and was satisfied with result.

(10) High draft system on low drafts found a benefit in quality of yarn.

From these reports one would say that some benefit is found under certain conditions by adopting high drafting. Many other cases could be cited in the coarser branches of the trade which are quite out of the question. When you begin to deal with bulk roving and short stapled

(Continued on Page 30)

ALUMINUM PAINT

The "Coat of Metal" Protection



ALUMINUM PAINT has its special advantages to industries of all sorts. To some it means added efficiency, to some actual saving of the product, and to *all* it means protection to property and equipment.

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Trade Mark

E. F. HOUGHTON & CO.



GOING IN CIRCLES

Had Lindbergh gone 10,000 miles in circles, he would have gotten nowhere

VS. GETTING THERE

But Lindbergh aimed at Paris. He did the unusual. He GOT There.

Similarly there are those in the textile field who are tied down to oil traditions. They believe that viscosity oil tests are of utmost importance. They believe that "old-fashioned" oils are the best. They are simply going in circles and aren't getting anywhere. They aren't improving things. They aren't saving oil. They aren't saving money.

Houghton's absorbed oils cost more per gallon, true, but they cost less than half as much per year and they give BETTER results.

Houghton has shown the world the DIRECT ROUTE to correct lubrication.

How?

By putting two separate and distinct lubricants into one. Each lubricant has properties all its own. The one furnishes FILM STRENGTH to prevent metallic contact between the shaft and the bearing. The other furnishes the SLIPPERINESS. You see, the second lubricant lies BETWEEN the two films of the stronger oil.

Isn't it logical that an oil of high lubricity between two such films will produce better results than a single oil between two metal surfaces?

Besides, Houghton's Absorbed Oils STAY PUT.

They don't spatter or leak. Lubricants are needed on the bearings—NOT on the floors, ceiling, or on the manufactured products.

In most textile mills this latter property alone is worth many times more per year than the mere cost of the lubricant.

Don't go in circles if you want to GET there.

The Houghton man in your territory will be glad to call on you, without obligation. He will show you how to GET THERE via the correct route—the DIRECT route.

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Practical Discussions By Practical Men

Question for Eastern.

Editor:

I note with interest what Eastern has to say about the duties of his card hands. I would therefore like to ask him what he considers the duties of his card grinders.

R. H. B.

Uneven and Cut Sliver.

Editor:

I would thank you to publish the following:

Would like for some good carder to give me the following information:

The cause of extremely uneven and apparently cut sliver between the front and calender rolls on drawing frames. The sliver shows a lot of thin places—would the collars on the metallic rolls cause this? We have a 1½-inch front roll, 24 pitch, and 1½-inch back roll, 16 pitch. We are running a 50-grain card sliver. Draft of back drawing 5.80, front 6.00. The front drawing shows the cut condition decidedly more than the back.

"Learner."

Tension on Speeders.

Editor:

I would like to ask the following questions through your Discussion Page:

Why are the cams on a Whitin speeder made in a different shape from all other speeders?

Why do you often see a speeder hand changing the position of the cone belt, or taking up or letting off the tension, as they call it? What reason can you give why the tension gear will not take care of the tension from one doff to another.

Want-to-Know.

What Is 100 Per cent?

Editor:

Will you please give me space to ask the following question?

I noticed recently in one of the textile papers that a mill was running 110 per cent where it used to run 75 per cent. Mr. Editor, I have always been taught that 100 per cent is equal to the whole or perfect. If a barrel will hold 50 gallons, when we put in 50 gallons the barrel is 100 per cent full. Suppose I run 100 times for ten hours without stoppage or belts slipping, then I should have 100 per cent production. How do a large majority of the mills figure that I would have 110 per cent?

S. C.

Wants Better Carding.

Editor:

I should like to ask the following question through your Discussion Page:

How can I improve my carding? Our cards are sharp and set up right but still at times, the work

The Practical Discussion Department of the Southern Textile Bulletin is open to all readers whether they are interested in seeking information on technical questions or are willing to help "the other fellow" who has experienced trouble in some phase of his work.

The questions and answers are from practical men and have often proved extremely valuable in giving help when it was urgently needed.

The interchange of ideas between superintendents and overseers develops a great deal of worth while information that results in much practical benefit to the men who are concerned with similar problems.

You are invited to make free use of this department and to join in discussing various problems that are mentioned from week to week. Do not hesitate because you do not feel that you are an experienced writer. We will take care of that part of it.—Editor.

looks as though there were no carding action at all. Lumps two inches broad and the full length of doffer, come through one after the other, and at times, one could not tell the white cards from waste line.

We set flats .010, doffer .007, feed plate .012, lick to cylinder .010.

We use low grade cotton and spray it with "minerol" oil.

I shall appreciate any information.

"Worried."

Answer to Miss.

Editor:

The question by Miss. is certainly an interesting one after all that has been said about oil spraying of raw cotton. There are some manufacturers who believe that spraying the raw cotton at the pickers, in the same way that oil is being used in some mills, has proven very beneficial. It is being used in some mills and others are thinking of trying it. It is said to lay the dust, and to kill the electricity in the carding department.

Water.

To Make a Simple Band Making Machine.

Editor:

Our mill being so far away from spindle banding makers, we want to make our own bands. What is the best way to make a home-made, simple, automatic spindle banding making machine?

Western.

Machine for Stapling Cotton.

Editor:

Is there a machine made to staple cotton? Will some reader tell us something about this?

Cotton.

Fractional Reed Numbers.

Editor:

Is it advisable to have loom reeds made to fit odd sizes and fractional sleys, etc.?

Reed.

Answer to Texas.

Editor:

Regarding Texas' question, is it worth while to have a picker room lap weigh daily report and what

kind of a report to have? The answer by all cotton manufacturing experts should be, yes, it is worth while. And the reason why it is a good thing to have a picker room daily report, it will give the daily production. But the best good of such a report comes from the fact that it gives the weight variations. The picker room is the place to begin to keep the weight, sizes and numbers of rovings and yarns. To do a good job the picker head man must watch the feeding in of the cotton and make laps that are even in thickness and weight per yard and also per lap. The right kind of a report is laid out with three columns. The most of the laps should weigh on the standard and be put down in the middle column. The light weight ones in the left hand column, and those which are too heavy in the right hand column. This enables the head weigher to note at a glance whether the work is operating to the heavy side or to the light side. One should balance the other. Those laps which vary over one pound from the standard should be marked with a cross to show that they have been returned to be reprocessed. Many mills have adopted this style of a picker room report and are satisfied with the result.

H. D. M.

Answer to Bleacher.

Editor:

Can more heat be put into a hurricane dryer by speeding up the fan? My fan now revolves at 450 r.p.m.

No, you cannot put more heat into the hurricane dryer by speeding up the fan. A fan does not create heat. But by speeding up the fan to 500 r.p.m. you can make better use of what heat you already have. It will cause it to circulate more and the same heat will dry better.

H. D. M.

"Black and White"

The Research Staff of E. F. Houghton & Co., Philadelphia, has begun publication of a new periodical "Black and White," the first number being just off the press.

In the language of Chas. E. Car-

penter, president of E. F. Houghton & Co., "the object of 'Black and White' is to circulate more and better technical information pertaining to the industries upon those topics with which the Houghton organization in general and the Houghton Research Staff in particular are much more familiar than anyone else. And it is further proposed to present this information in a somewhat different way. For years it has been the ambition of several of the Houghton Executives, to publish a technical magazine, couched as far as practical in nontechnical language. 'Black and White' is going to be the effort to realize this ambition.

"Much of the information which will appear in 'Black and White' will be of a type that would not be appropriate to publish in the paid subscription journals."

The first issue contains several articles of timely interest to mill men. The best idea of the magazine may be gained from the table of contents, which lists the following articles: The Leather Belting Exchange; Controlling Cotton Warp Sizing Pays Dividends; Life of Comb-ing Aprons; Selection and Oiling of Rayon; Grading Raw Silk; Economy in Lubrication; Uneven, Shady and Cloudy Goods—Their Causes and Prevention; Cotton Yarn Testing; Textile Mill Power Problems; A Belting Survey and Its Results; Efficient Waste Collection; Fulling and Scouring—And Mediums Used; Stretchless Three-Ply Belt Utilizes Old Leather; "Accumulator" Produces Beneficial Results.

Link-Belt Announces Anti-Friction Belt Conveyor Idler

By W. E. Philips, Engineer,

Link-Belt Co., Chicago.

Announcement is made by Link-Belt Company, Chicago, of the introduction of their Anti-Friction Belt Conveyor Idler and Return Rolls of an advanced type of belt conveyor equipment.

It is said that this equipment embodies many salient features of advantage in design which are the result of years of study and research.

Bearings are Timken tapered roller bearing type, which are totally encased within the roll hub.

The outstanding feature of the idler is the absolute protection afforded by a labyrinth grease seal, mounted in a grease cap which also serves as an outboard reservoir and lubricates the bearing on the outside as well as on the inside, especially when the roll is on an incline. This, in turn, is protected by a deflector plate which deflects dirt, dust, grit or any foreign material away from the bearings and grease seal, and will not permit the wash-

ing of the grease away from the labyrinth.

The rolls are mounted on a self-cleaning "T" base. All rolls are interchangeable, being capable of serving in any of the three positions. The entire frame is riveted, and is without bolt or nut to work loose or to come out of adjustment.

Another advantage claimed is the close working tolerances to which all parts are built, closer than have ever been attempted in belt conveyor history.

The use of specially-constructed manufacturing tools assures alignment of bearings, and a well-balanced concentrically running roll.

Special care is exercised in the machining of the roll shell, to obtain uniformity of thickness of the wall into which the machined heads are pressed and securely held in place by spinning.

The heads are dished for rigidity and strength, and the entire construction is such as results in maximum strength.

It is claimed also that the superior design and construction of the roll make it practicable to vary the characteristics of the material used for the roll shell. Further, a special iron has been developed for use in coke plants, that resists the corrosive action of sulphuric fumes and the abrasiveness of coke dust.

Moreover, Link-Belt rolls have been granitized for the handling of certain types of material such as salt, alkali and various other materials that cause incrustation, pitting

and rusting of ordinary steel or iron.

The idler rolls are supported in malleable iron brackets having a large bearing surface for supporting them, and they are not dependent upon the use of slots. The brackets are so constructed as to support the ends of two adjacent rolls, thus obtaining perfect alignment of rolls. Roll shafts are supported at both ends close to the rolls, without overhang, thus reducing the bending moment to a minimum.

Rolls are spaced far enough apart to permit convenient removal from the frame by simply lifting the mount without the use of any tools.

Idler rolls are made in various standard lengths, and they are furnished in combinations to suit standard belt widths. The end stands are securely riveted to the "T" iron base, and are spread at the foot to present a rigid support for the idler.

The Link-Belt anti-friction belt conveyor idlers are made at the Ewart plant of the Link-Belt Company, Indianapolis, in a building especially designed for their exclusive manufacture.

Use of Cotton Cement Bags Urged By Citizens

Columbia, S. C.—The movement being launched to extend the uses of cotton and cotton products in South Carolina seems to be meeting with splendid progress over the

State, and letters strongly endorsing it are coming in from some of the largest farmers and business men in South Carolina, according to a statement issued here.

"I am certainly in sympathy with any movement that means the legitimate extension of the uses of cotton," writes Ben M. Gramling, of Gramling, prominent Spartanburg business man and farmer.

"It is not only a patriotic duty but just common business judgment that should impel every agency as well as each individual to put forth every effort possible to find and suggest new uses for cotton, as well as not stand idly by and see some other commodity crowd our cotton out of the old channels of trade.

"To my mind there can be nothing superior to cotton for cement sacks. I trust that someone will provide a treatment of cotton bags that will protect the fibre against the free acid in fertilizer and render a great service by making cotton the most desirable material for all our fertilizer. Bagging for baling cotton and cotton goods made of cotton it seems to me would be good business, even if it cost a little more. It would give better protection, if properly constructed and would take up a great amount of low grade cotton.

"I am in hearty accord with you. Keep the good work going."

M. B. Dunlap, of Honea Path, wrote strongly endorsing the movement and saying that such a movement should have been launched long ago. Mr. Dunlap expressed the belief that the South Carolina High-

way Commission should demand that every sack of cement coming into the State for public works should come in cotton sacks, he said he is informed that foreign cement is coming in to the State put up in jute containers. He feels that this should be stopped and requirements should be made that all of this cement should come in cotton sacks.

Walter E. Gossett, of Greenville, writes that he hopes the movement will not stop until everything that requires a bag to be put up in should be cotton sacks. He also expressed the belief that all cotton should be wrapped in cotton bagging.

"I would like to see every cotton farmer in South Carolina rise and demand that every pound of cement used on public works in South Carolina, come in cotton sacks, and the business people should back them in this demand, because cotton is our chief money crop," writes W. A. McKelvey, of Pelzer, a Greenville county farmer.

Entwistle High Speed Warpers.

The equipment of the new Chicopee Manufacturing Corporation at Gainesville, Ga., includes four of the T. C. Entwistle Company high speed warpers known as the No. 28 warpers. These are the first of Entwistle high speed warpers installed in the South, but it is claimed that the four high speed warpers will take the place of 20 ordinary warpers. They warp from 8-inch cones.

Shuttles and Reeds Progress Apace

There was a time when a shuttle thrown by hand traveled thru the shed at a rate of a few miles an hour. Reeds acting as guides in those days had an easy time of it.

Now a larger, more efficient shuttle shoots across the shed at a clip of 30 miles an hour. Reeds coming in con-

tact with this flying object must be of a stronger stuff than those which suited the needs in times gone by.

The Reed manufactured by the Steel Heddle Company is a modern piece of loom equipment. This Reed has grown apace with the shuttle. May we send you a sample?

STEEL HEDDLE MANUFACTURING COMPANY

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"STEEL HEDDLE" REEDS

The Steel Heddle Line

"Duplex" Loom Harness (complete with Frames and Heddles fully assembled.)

Drop Wires (with Nickel Plated, Copper Plated or Plain Finished).

Heddles
Harness Frames
Salvage Harness
Leno Doups
Jacquard Heddles
Lingoes

Improved Loom Reeds
Leno Reeds
Lease Reeds
Beamer Hecks
Combs

Visiting Europe

By David Clark

(Continued from Last Week)

On Thursday morning, June 16th, at 8:30 o'clock, we left for Lucerne, Switzerland, and were much pleased to find on the train several people who crossed on the Carmania with us.

We traveled that day through a beautiful part of France and it was interesting to note that every foot of ground was under intense cultivation. The French farmers and their wives and children are industrious and careful farmers and as the soil is the real source of the wealth of any country, I can not help but feel that France will recover its wealth earlier than is generally expected.

In fact, I have the idea that France is even now in far better condition than is generally supposed and that much of their pessimistic expressions are for the purpose of securing a partial cancellation of war debts.

The United States went to the assistance of the French when they were hard pressed and in a desperate plight.

The United States paid all of its war expenses, including rent of warehouses and depots in France, and at the end of the war asked for no reparation payments.

In addition to meeting all of its expenses, the United States loaned money to France and now France does not want to repay such loans.

Government debts can only be paid through taxes and in its last analysis the French propose that instead of a certain amount of taxes being paid by the business interests and wealthy men of France, that the United States get its money by taxing the business interests of the United States.

The cancellation of the French debt would mean that a cotton mill in France would be relieved of taxation and some cotton mill in the United States that contributed through the war taxes to the support of our army, would have to assume sufficient additional taxes to make up the amount of which the French cotton mill would be relieved.

We have paid, or are paying, our war expenses through heavy taxation and I can see no reason why we should pay the war expenses of France through the assumption of additional taxes.

The English, with their usual high regard for credit, have settled their indebtedness with us with long time notes, but the French still howl and want us to assume their burden.

As we traveled that day I watched their fields in which they were raising wonderful crops and nowhere did I see a dead tree or even a dead limb. Wood is so scarce and valuable that even the small branches are carefully collected and placed in bundles as fire wood.

The landscape is dotted with houses but none of them are of wood or frame. The walls of the houses are made of stone or stucco and there is always the red tile roof

which in the case of the older house had turned almost black.

We had been told that our train went through to Lucerne, but were to learn that railroad information in Europe was seldom reliable, for about 4 o'clock in the afternoon we reached Basel, Switzerland, and were told to get off.

As it was on the border of Switzerland, we had to go through the customs, but that was very easy, because the custom officer, noticing the Rotary Club labels on our baggage, asked us if we had been attending the convention at Ostend and passed us without opening any baggage.

We found that we had to spend three hours in Basel and decided to take a trip around the city, but it was a job to get a conveyance, as everybody in that section of Switzerland speaks German and none of us knew more than two words of that language.

They have very few automobiles, so we went after a hack, which was an open affair with two seats facing each other and the driver on a high seat on the front.

It required about 15 minutes to negotiate a trade. By holding my finger on my watch and moving entirely around the dial, I finally got him to understand that we wanted to ride for one hour and then we began the struggle to discover the price. He kept mentioning the number of francs, the Swiss money being in francs, but that meant nothing to me. Finally I laid down five francs on the seat and kept on adding francs until he said it was all right. Even then I got stung, for I had been dealing in French francs worth 4 cents and had not learned that Swiss francs were worth 20 cents each.

However, he was a very good old scout, and although we could not understand a word he said, he kept up a continual conversation, describing the points of interest as we traversed the streets and hills of Basel.

At 7 o'clock we left on another train for Lucerne and found a scene of great beauty. A beautiful walk with overlapping trees skirts the lake and back of the walk the hotels are located.

The lights from the hotels and those from the constantly moving lake steamers were reflected upon the water and over its surface were hundreds of rowboats drifting about.

On the top of the mountains, which rise almost vertically, were the lights of numerous pavilions and from several of them searchlights played upon the lake and the mountains.

It had been twenty-seven years since my previous visit to Lucerne, but I had always remembered its beauty.

The Grand National Hotel gave our party of five a suite consisting of three bed rooms, with two baths

and a sitting room for a total of \$20 or \$4 apiece. That was about the best accommodation we received in Europe and the price was very reasonable compared with other places.

The next morning at 11 o'clock we left on a Lake Lucerne steamer that zigzagged back and forth across the lake, stopping at all of the landing places, and reached Fluelen at the extreme end of the lake about 3 o'clock.

The trip down Lake Lucerne is very beautiful, as the mountains, which rise to great heights from the edges of the lake, were covered with snow.

It was warm on the boat but above us we could plainly see the snow covered caps from which the snow rarely ever melted.

At Fluelen we bought tickets to Milan, Italy, on a train that went over the Alps and through St. Gothard's Pass. Being mindful of the saying that "only fools and Americans travel first class," we bought second class tickets, but when we got on the train could find no second class compartment that was not filled and we therefore went into a first class one.

When the conductor came through he seemed insistent upon throwing us out but we finally made him understand that we wanted to stay on the first class compartment and pay the difference in price. We paid him an amount equivalent to about \$2 each and he gave us a slip with something written on it in his own language.

That afternoon we crossed the Alps amid scenery that is generally considered to be unsurpassed in the world. There were many tunnels, one of which required ten minutes to pass through and at some places we could see four and five turns of our track below.

About 6 o'clock we stopped at some place, I believe it was Logarno, and the railway guards threw open the doors and told us to get out.

I asked that why we had to get out and a fellow with a sign on his hat reading "Interpreter" said we were at the Italian border and had to go through the customs.

One porter carried our baggage to the custom and with the "Interpreter" acting as busy as a dog with the hives, we lined up and went through the customs and then another porter carried our baggage to another train. After we had paid both porters about twice what their services were worth we found that without knowing it we had hired an interpreter and had to pay him more than we paid both porters. He was very good at interpreting that fact.

That was our first introduction to the "robbers" of Italy, but it was by no means our last.

We settled ourselves in a first class compartment and enjoyed the scenery for about an hour when the conductor showed up and I handed him our tickets, but although he

could not speak English, he made us understand that we were riding first class on a second class ticket and I could not find the extra fare slip the other conductor had given me. When I finally found it, I thought I was all right, but we would not take it and kept arguing. He finally went off and brought back an American girl from Washington, D. C., who could speak both English and Italian, and she said that the extra fare we had paid was only to the Italian border and that we had to pay about 250 lira, or \$45 extra fare from the Italian border to Milan.

On account of going from one country to another and the expense of making the exchange in money, we had only what cash we thought we would need and found that our entire stock of coins amounted to only about half of the sum he wanted.

We had plenty of money in American Express Company travelers checks which all hotels and banks cash, but he would not accept them and for awhile it looked like we would have to get off.

About the time we had given up hope of getting to Milan, the American girl came back and offered to loan us the 100 lira which we needed to satisfy the conductor and we accepted her offer with profuse thanks. As she and her mother were spending the night in Milan, we were able to get our checks cashed and to pay her back that night.

We reached Milan, Italy, about 8 o'clock and went to the Continental Hotel, which had been recommended to us by some one who must have been an enemy.

The accommodations were poor but the rates were high. I have no doubt that they charge Americans higher rates than they do Italians or people from other sections of Europe.

Last year, Dr. Segre, of Milan, chief chemist of the La Soie de Chatillon, manufacturers of rayon, was in Charlotte, accompanied by his American representative, John Inge, of New York, and his Southern representative, John L. Davidson, and I spent several hours with him.

I wrote him from Ostend that I would visit Milan and at my hotel I found a note saying that at 7 a. m. next day he would take me to one of their plants.

(To be Continued)

Alice and Pickens Mills' Night and Day Operations.

Easley, S. C.—The Alice Cotton Mills here has completed the enlargement of its village and the plant is now operating day and night.

Announcement has been made by C. B. Hagood, president of Pickens Mill, that work will begin at once on the construction of between 50 and 75 new residences in the Pickens mill village. Decision has been reached to operate the Pickens Mill day and night and the new houses are necessary for the additional employees.

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The Fine Points of Carding

A Series of Articles Contributed to a Prize Contest on This Subject

Number Forty-three

In discussing the "Fine Points of Carding" we find a broad subject to discuss, although we have but one machine to deal with. The success of the mill depends very much upon the efficient operation of the cards. It seems that within the last several years mill men have been led to see the importance of good carding in manufacturing of cotton yarns.

First of all when the cards are erected they should have a solid foundation. If they don't have a solid foundation they will give lots of trouble after they have been put into operation, because you cannot keep them properly set. After the cards have been properly erected and put into operation we find they require close attention in every way.

Keeping the cards clean is one point which has something to do with the quality of work the cards turn out. Very often we find cards that are not kept clean enough. Then when they are cleaned, the hand are careless and get a lot of lint and dirty cotton back into the good stock. Then later in the other processes it will show up as bad carding. The screen ought to be taken out and cleaned about every eight months with gasoline and then polished with Spanish whiting.

The cards must not be run too long without stripping, and we should see to it that they are stripped clean. I think they should be stripped four times every twelve hours. Strip every other one and then wait one hour and strip the rest you will have less uneven work. If the stripping is neglected it will cause what we call cloudy carding and will show up in the finished product. The laps when they come from the picker must be uniform and even if all the cards are expected to card alike. Also split laps will cause uneven work.

Under the head of grinding there are many things which will affect the card if not properly looked after. When you start to grind, clean the card well all over inside and out and oil all the running parts and don't set the grinder roll too close until you have the card started. Then draw it down to where you want it. And be sure the traverse grinder is running true in order to properly grind the card. I think a card ought to be ground from 8 to 10 hours and should be ground every 18 to 21 days, not grinding too heavy. Heavy grinding will heat the wires and take out the temper. Also the points will get hooked if ground too heavy for the length of time we usually grind, which will make lots of neps in the yarn. The emery fillet should be changed every time 10 cards are ground. After the card is ground all screws and lock nuts must be tightened to hold everything to place.

The speed has a great deal to do with the quality of work that is turned out by the card, that is the speed of the doffer, because the cylinder does the carding and the doffer the delivering. If the doffer delivers it too fast it will not card it well. Light carding is the best always when you have the amount of cards to card it like it ought to be. When we come to drafting, every carder has his own idea about drafting. I think a long draft is better than a short one, because it will straighten the fibers better. The licker-in must be sharp at all times and have a smooth even surface. If too much oil is put in the cylinder and doffer bearings it will get out on the edges of clothing and make the cotton fibers stick worse, so that cylinder and doffer will become overloaded from one stripping to another and affect the quality of the work. The clothing should be watched and kept tight, because if it gets loose the wires will slip back under the clothing and not have the right angle to do good carding. When cards are clothed the right number of wire should be used for the grade of work that is going to be made. For medium numbers, I think No. 100 wire is best on cylinder, doffer and flats.

The mote knife should be set to the right angle if it is expected to remove as much foreign matter from the stock as it should. I think the setting of a card depends somewhat upon the condition the card is in. To get the best results we find it necessary to experiment to see what settings will do the best work on the different grades of cotton. Under ordinary circumstances I would suggest the followings settings: Set doffer, licker-in and flats as close to cylinder as you can without touching. Cylinder screen to cylinder .017; feed plate .010. Set mote knife the right angle to take out what you want. Lower mote knife .010, upper mote knife .012; stripper plate to cylinder .017 to .034; draft plate .020. When carding extra light and the card is in good condition set all setting as close as possible without touching. Through experimenting and close observation and hard work we can know just what is best suited to our needs as it takes all of these to get quality and quantity and that is what the mills are calling for today.

Cotton.

Number Forty-four

I wish to enter the contest "Fine Points of Carding" and say a few words on such important subject. First, cards like all other machinery, should have a good foundation, otherwise we can't secure accurate settings. Oiling should not be neglected, as worn bearings and shafts will cause trouble. Laps should be made in even sheets. Improper division of air current on pickers, will produce laps with thick and thin places, the heavy

places will hold the feed roll up to the point where it will not give sufficient pressure on the thin place, and will cause licking or pulling in bunches. This will put extra work on the finer parts of the card, and also cause cloudy carding. Lap guides should not be drawn in far enough to cause the selvage edge of the lap to run under the rolls doubled up. This will hold the feed roll from the middle of the lap and cause licking. The results will be cloudy carding. Feed rolls should be properly weighted, to insure as much weight as possible on the thin part of the lap.

I am an advocate of carding from heavy laps especially when carding from stock with a lot of seed and trash in it. The licker-in will have more time to do the cleaning, the feed roll will run slower. This will lessen the possibility of licking, and will save the cylinder and flats from having to remove many of the heavy impurities, such will also help to reduce cloudy carding. Split laps are a great drawback to good carding. Split laps are caused by a greater bulk of the stock being carried to the bottom cage on the picker than the upper cage. To prevent the laps from splitting, a greater amount should go to the upper cage than the bottom. I have seen card tenders when laps were splitting, pick them down and let run into the card doubled up. This is injurious to good carding, and should not be done.

The feed plate plays an importance in good carding. When the staple being worked is longer than the nose of the feed plate, the licker-in will exert a heavier pull on the stock before it should, and present same to the finer parts of the card in a poor condition. The results are low breaking strength of the yarn. On the other hand if the nose is longer than the staple being worked, the feed roll will release it before reaching the closest setting point on the licker-in. The result will be improper cleaning. On the lower edge of the feed plate is a back curve, and if the fiber is long enough to hang over this point before it is released by the licker-in, the face or nose is too short, and the result will be broken fibers, because they have nothing beyond the point to support them. The licker-in must be kept in good condition to get good work. When the teeth are dull or bent down, it will cause cloudy carding. I don't think it a good idea to sharpen licker-ins with a brick. When they need polishing, it is better to place the licker-in in a box with bearings to fit and cover with sand, run about 50 r.p.m. This will smooth up the sides of the teeth and polish the shell. But when the licker-in is in poor condition, it is best to send it to the shops and have them rework.

The clothing of cards is an important item, and should be done with care. If possible always use a clothing machine when clothing a card. It can't be done right with a block and tackle. Tapers should be cut to prevent spiral winding. Before the clothing leaves the shops, the tooth is ground straight with the knee, and to place it on the card in a spiral condition, will change the point to a slight angle, which cannot be ground right, neither will it give a straight pull to the fibers when in working position.

Clothing should be pulled on the card and allowed at least to stand over night, so that it will have time to set to the atmosphere condition, than unwound, and repulled at around 350 pound pressure, which will prevent the clothing from bucking, without it is run at too higher rate of speed. Cylinders should not be run over 170 r.p.m. Licker-in 425 to 450, doffer 7. The greatest parallelization takes place between the setting point on the cylinder and doffer, the longer the fibres stay at this point, the straighter they will be when delivered, and the stronger the yarn will be, the better the spinning will run.

Grinding is an important task, and should be done by a man that knows what he is doing. When he sets a part to a certain gauge, he should know what bearing it will have on the work. Before placing the grinding rolls on the card, the roll should be examined to ascertain that it is good condition. If the clothing on it has been run 70 continuous hours, it needs changing. Clothing or fillet that is worn out or filled with dust and gum will not do more than polish the tooth. Then see that the card is in good condition. Brush it clean, see that the screens are in good condition, look for high and low flats. To ascertain whether there is high and low flats try out all setting points, by gauging at the same point by turning the flats, or they can be taken off and laid face down on a absolute smooth surface. Insert gauge to see what part has the greatest bearing on it. One of the fine points in grinding, is the placing of the rolls in the grinding stands. If one side rests heavier on one side of the card than the other, it will cause a low side. The results will be, improper cleaning and cloudy carding. I have proven to myself that more ends come down in the spinning room from poor stock cleaning than any other one thing. Therefore, it is of the greatest importance that we should be careful with the parts that have to do with the cleaning. The small impurities are the things that give us the greatest trouble, and these are the things that we must depend on the card to take out. When setting the licker-in screen, it is best to take the licker-in out and place in the bearings a quadrant gauge same size as licker-in. Move quadrant from end to end until the required setting is obtained. A No. 10 gauge is a good setting for feed plate; 9 for licker-in to cylinder; 11 and 9 for mote knives. Back knife plate, lower edge to 17 upper edge to 32, in setting this plate farther from the cylinder at the

(Continued on Page 26)

Spinning Frames in the Crown Manufacturing Company, Pawtucket, R. I., one of the best yarn mills in the country, completely equipped with U S Products.



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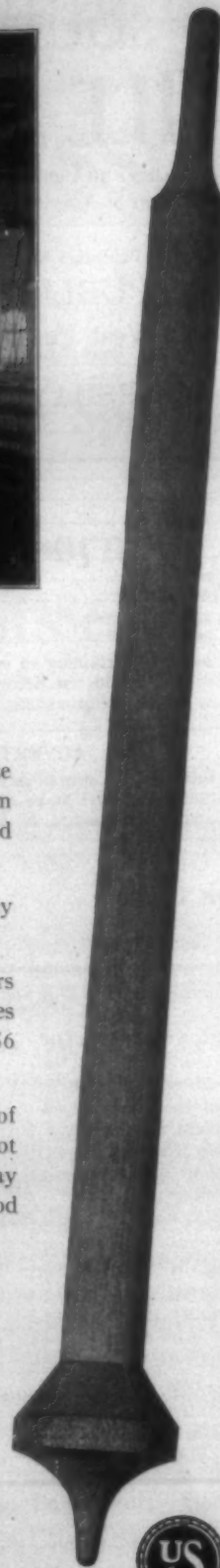
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Bullish On Cotton

WE are bullish on the price of cotton and can see little reason to expect any material decline from present prices.

We urge the cotton manufacturers to forget the fact that, when cotton sold at 12 cents, they failed to get a supply and to consider the present situation upon its merits.

There are two factors that will have their effect upon prices during August and September.

(1) There is likely to be rapid deterioration due to the smaller use of fertilizer this season. A crop can grow upon its natural fertilization up to a certain point, but beyond that there is likely to be rapid deterioration if the growth is not sustained by artificial fertilization.

(2) Boll weevil scares are almost certain to begin about August 10th. This has been an ideal season for the growth of boll weevils and the fact that there was not much boll weevil damage during the past two years, has caused many to believe that damage will not be severe this year.

During the past week we drove from Charlotte to Florence, S. C., and from there to Sumter, Columbia, Newberry, Laurens, Spartanburg and back to Charlotte, and farmers in every part of that trip told us that boll weevil infestation was greater than it had ever been at this time of the year.

We were also told that because of small damage in 1925 and 1926, farmers were not dusting except to a very small extent, and with the present infestation allowed to go unchecked, nothing but a long dry spell can stop the growth of boll weevils.

While they are probably worse in

South Carolina than in other sections of the South, they are plentiful enough in almost every section to make possible serious damage to the crop and there will be many boll weevil stories and scares during August and September.

Do not forget that during the years of boll weevil damage the crops were:

	Bales
1921	7,978
1922	9,729
1923	10,140

With boll weevil infestation as great or greater in many sections than at this time of the year in either of the above years, we believe that it is entirely possible for the present crop to be very much smaller than is generally estimated.

When cotton declined below 16 cents last fall we strenuously urged Southern mills to buy the market down.

When cotton was below 13 we repeatedly called attention to the fact that it was below the cost of production, and as an incentive to do likewise we stated that some mills were buying two, three and even five years' supply.

On March 24th when cotton was 14 cents we predicted that the price would go to 17 cents during the summer and stated that we would not be surprised to see 20 cents.

As an argument for action we stated:

"The man who fails to buy cotton at 12 cents dislikes to cover at 14 cents and yet 14 cents is below the cost of production and it is further from 14 to 17 than from 12 to 14.

It is true that many men who really thought an advance to be likely did not buy at 14 cents because they had failed to buy at 12 cents.

Too many mill men were lulled to sleep by bear talk about cotton shipped abroad not being consumed and that the carryover would be sufficient to keep the price down.

Will cotton manufacturers never learn that the price of cotton is affected very much more by anticipated factors than by things that have already been determined?

The June, 1927, consumption of cotton by American cotton mills was 144,000 bales greater than for June, 1926.

Allowing for 15 per cent waste, 144,000 bales is equivalent to 61,200,000 pounds of goods, or assuming an average of four yards to the pound, it is equal to 244,800,000 yards.

In other words, American mills produced 244,800,000 more yards of cotton goods during June, 1927, than in June, 1926, and yet sales during June, 1927, were in excess of production.

One of the large commission houses said in its weekly letter of July 16, 1927:

This combination reduction in acreage and boll weevil threat was too strong for the doubtful buyers to resist. In consequence, they have been coming in for large quantities of print cloths and sheetings, especially the former, during the last few days. The result is that we have had the largest week's business since the last week in May and that our sales of grey goods were 160 per cent of production.

Naturally, the advance in the cotton market, coupled with this heavy buying, led to further advances in prices. Print cloths have been advanced at least $\frac{1}{8}$ cent, sheetings $\frac{1}{4}$ cent to $\frac{1}{2}$ cent, and denims and tickings 1 cent per yard.

The present situation is very strong and with more backbone on the part of commission houses and mill managers, good profits could quickly result.

Cotton mills in the United States are being dismantled faster than they are being built, and with the population of the country increasing at the rate of more than one million per year, there is but one logical result, and is a period of prosperity is certain to come.

Buyers naturally fight advances in prices and talk much about any advance in cotton reducing the volume of business.

It is natural to hear buyers make such statements, but it is exceedingly strange that cotton manufacturers have a habit of joining them in such argument and thereby give aid to the efforts to hold down the price of goods.

We are giving our opinion of the cotton situation and are doing so with sincerity, but we do not urge anyone to act in accordance with same.

Our only plea is that mill men study the present situation, without giving any consideration to the fact that they could have purchased at lower prices.

Is New England Mill Liquidation Wise?

Sentiment in New England favoring liquidation of cotton manufacturing enterprises has spread until dissolution of a unit whose recent record has been better than the average is recommended in certain

quarters. Four of the five directors of Lyman Mills of Holyoke favor a winding up of the company's affairs, a proposal which is opposed by the treasurer and selling agents.

Lyman Mills is a combination coarse and fine goods proposition—two mills in one, in effect, with separate supervision and separate book keeping for two plants which are, however, housed under one roof. In all the company has 2,300 looms and 120,000 spindles, latter being apportioned 75,000 to manufacture of fine products and 45,000 to coarse. In the fine goods department are produced the same lines as turned out by the majority of New Bedford enterprises—lawns, shirtings, poplins, etc., of the very finest construction; in the other department, duck, sheetings, drills, etc.

Time was when the coarse goods department of Lyman Mills was a money-maker. But as Southern competition has developed, this end of the business has lost out, while the fine goods department has held up splendidly.

Lyman Mills has an excellent record. Founded more than 70 years ago, it has paid dividends every year but four since 1854. Even during the post deflation depression in the Northern textile industry, it has more than covered substantial cash disbursements.

Of course, future possibilities are of vastly more importance than past history in determining whether this sturdy company should be kept in operation.

Liquidation would seem to be a rather timid policy, but Lyman directors believe by such liquidation \$165 a share can be realized and they are apparently tired of looking at red ink figures and are perfectly willing to pass the job of running the mill to others.

It is folly to make goods that cannot be sold at profit, but is there not merit in the suggestion that the fine goods prospect is not so hopeless as to warrant scrapping the whole enterprise? — Boston News Bureau.

Effect of the Yarn Code

WE have recently had a good deal to say of the Code of Carded Yarn Trade Practices which is now before spinners and distributors of carded yarns. We feel that the code is a matter of extreme importance and offers the yarn trade relief from many trade abuses that have long affected its welfare.

Because we are so firmly convinced of the advantages of the Code as a guiding principle in yarn merchandising, we are reprinting on Page 24 of this issue an article from the Textile World Journal which gives an interesting and timely analysis of the effect of the code. We publish this article with the hope that every spinner will study it carefully and with the idea that it may give some of them a new insight into the effect of the Code.

The Yarn Merchants' Association has gone on record as being unanimously in favor of the principles set forth in the Code and we hope to see a similar approval from every carded yarn spinner in the country.

Personal News

H. P. Hunter, of Elberton, Ga., has been elected treasurer of the Elberton Mills, of that place.

W. P. Minter has been elected secretary of the Elberton Cotton Mills, Elberton, Ga.

F. G. Shinn has resigned as secretary of the Elberton Mills, Elberton, Ga.

I. G. Moore has resigned as superintendent of the South Texas Cotton Mills, Brenham, Texas.

Frank Van Ness has disposed of his interest in the Elberton Mills, Elberton, Ga., and resigned as treasurer.

William Pitts, formerly of Gastonia, N. C., is now located at Ware Shoals, S. C.

W. L. Smith has been promoted to second hand in No. 4 weaving at the Massachusetts Mills, Lindale, Ga.

S. L. Buchanan has resigned as assistant overseer of spinning at the Erwin Cotton Mill No. 4, West Durham, N. C.

J. J. Kinsley, formerly of Tifton, Ga., is now overseer of carding at the Thomaston Cotton Mills, Thomaston, Ga.

J. V. Hunt, of West, Texas, is now assistant superintendent of the South Texas Cotton Mills, Brenham, Texas.

T. A. Adams, treasurer of the South Texas Cotton Mills, Brenham, Texas, will hereafter act as superintendent also.

W. L. Allen has resigned as superintendent of the Horn Company, Spindale, N. C., to become overseer of weaving at the Stevens Manufacturing Company, Burlington, N. C.

Joseph Leake has resigned as superintendent of the Weetamoe Mills, Fall River, Mass., to accept a similar position at the Judson Mills No. 3 (Art Cloth), Lowell, N. C.

W. Harrison Hightower, of Thomaston, Ga., and president of the Georgia Cotton Manufacturers' Association, has been in New York on business this week.

M. H. McLendon has resigned as overseer of carding at the High Shoals plant of the Manville-Jenckes Company, High Shoals, N. C., and accepted a similar position at the Winnsboro Mills, Winnsboro, S. C.

R. E. Adams, formerly with the Wilco Mills, North Wilkesboro, N. C., has become overseer of spinning at the Hickory Spinning Company, Hickory, N. C.

Arthur L. Emory has resigned as agent for the Wamsutta Mills, New Bedford, Mass., and will have charge of the manufacturing operations of the Aragon-Baldwin Mills, with plants at Rock Hill, Chester and Whitmire, S. C.

J. T. Davis, formerly superintendent of the Phenix Mills, Kings Mountain, N. C., but more recently of Gaffney, S. C., has become night superintendent of the Lydia Mill, Clinton, S. C.

G. H. Mahafee, formerly with the Inman Mills, Inman, S. C., has accepted the position of assistant superintendent of the Louisville Cotton Mills, Louisville, Ky.

H. E. Bates, who recently resigned as superintendent of the Judson Mills No. 3, Lowell, N. C., has retired from the mill business and will devote his time to farming. He will erect a handsome residence in Spartanburg, S. C.

H. D. Wheat.

Gaffney, S. C.—H. D. Wheat, mill owner and philanthropist of Gaffney, died suddenly Tuesday afternoon at his residence from an attack of angina pectoris.

He had been in the mill business in Gaffney for many years, first as president of the Gaffney Manufacturing Company, and later owner of the Irene Mills and Irene finishing plant.

Mr. Wheat was superintendent of the two Clifton mills when he came to Gaffney to become connected with the first cotton mill ever built here. He later was identified with the Gaffney Carpet Mill, and upon that plant being sold by a receiver, he bought it and converted it into the Irene Mills, which has been a successful venture, manufacturing table cloths and fine goods. He was at one time an executive of the Loray Mills of Gastonia, and the Tucapau Mills, at Spartanburg.

While living largely to himself, Mr. Wheat made many contributions to charity.

Mr. Wheat was noted for his generosity to the people in his employ, performing many acts of charity of which the world knew nothing.

He was 67 years of age and is survived by his widow, one daughter, Mrs. Irene Mattox, of Asheville, N. C., and one son, Harry Wheat, of Gaffney.

A Correction.

P. A. Smith is general superintendent of the Loray plant of the Manville-Jenckes Company, Gastonia, and not manufacturing superintendent. A. Bowland is assistant, having charge of orders, cloth room, and shipping department, and is not general superintendent, as reported in last issue of the Bulletin.

Incorrect information given to Mrs. Ethel Thomas when visiting Loray some days ago caused the error.

The Chicopee Manufacturing Company plant at Gainesville, Ga., will be ready for operation by October 1. Machinery is now being installed in the plant. The main building is 236 by 933, and one story high.

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MILL NEWS ITEMS OF INTEREST

Taylorsville, N. C.—The North State Cotton Mills expect to add 4,000 additional spindles during the year.

Maiden, N. C.—The Union Mills have about completed installation of combing equipment and will hereafter produce fine combed yarns instead of carded yarns.

Rock Hill, S. C.—It is reported that the several plants of the Aragon-Baldwin Mills will be considerably enlarged, although there has been no official announcement from the company.

Columbus, Ga.—A. K. Adams & Co., Atlanta, have been awarded the contract for construction of a three-story brick and concrete warehouse, 280x75 feet, as an addition to the Columbus plant of the Bibb Manufacturing Company.

Statesville, N. C.—The Statesville Cotton Mills are installing some new equipment, including 20 cards and other preparatory machinery. The mills are also constructing a 75,000-gallon reservoir, and have plans for other improvements during the year.

Forest City, N. C.—Work on the new four-story concrete warehouse being erected by the Cliffside Mills at Cliffside is going forward rapidly.

The former storage room in the mill was needed for machinery when the mill was remodeled, making it necessary to erect the new storage house, which is 66x110 feet.

Elberton, Ga.—Frank W. Van Ness and associates, industrial engineers of New York, have relinquished their management of the Elberton Cotton Mills here. This action followed the sale of stock in the mill by two members of the Van Ness firm, Frank W. Van Ness and Frank G. Shinn, who were also secretary and treasurer, respectively, of the mill, to L. deK. Hubbard, president of the Elberton Cotton Mills.

It was also announced that G. Thurston Woodford, sales manager of the Elberton Mills, has tendered his resignation, effective August 13, and that Arthur G. Humphrey, of the Southern Textile Commission Company, New York, has been appointed exclusive selling agent for the firm. Mr. Woodford also maintains his headquarters in New York.

Coincident with the withdrawal of the Van Ness management, which became effective July 1, Mr. Van Ness and Mr. Shinn also resigned their positions with the mill and the following officers were elected:

L. deK. Hubbard, Meriden, Conn., president; E. K. Hubbard 2nd, Hartford, Conn., vice-president; Major H. P. Hunter, Elberton, treasurer; W. B. Minter, Elberton, secretary; H. L. Jay will continue as superintendent.

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Greensboro, N. C.—The new addition to the Blue Bell Overall Company's plant is rapidly nearing completion, and cutting of garments is expected to begin during the early part of September. This new addition will double the company's production and give it one of the largest plants of its kind in the country.

A. F. Harlan, vice-president, stated that the additional production will require several hundred more employees.

Greenville, S. C.—The contract for the construction of the Slater Mill at Marietta was awarded to the Fisk-Carter Construction Company, of Greenville, and work will begin at once. The contract was awarded from the office of J. E. Sirrine & Co.

The contract for the employees' houses was not let but this probably will be done in the near future.

The plant to be built will have 10,000 spindles. Several months will be necessary in constructing the enterprise but it is thought the plant will begin operation in the early part of 1928.

Beaufort, N. C.—C. Felix Harvey, of Kinston, was the highest bidder for Carteret county property of the bankrupt Kinston Knitting Company of Kinston, offered for sale here by Cowper, Whitaker & Allen, Kinston attorneys, for the receivers, the Farmers and Merchants Bank and Leo H. Tarvey, of Kinston.

His bid amounts to approximately \$18,000 as the Carteret county liens form about one-fifth of the total liens of \$88,500 against both the Kinston and Beaufort properties of the company. The sale will be subject to confirmation by Superior Court August 22 in Kinston. Only a few other local bids were received. Mr. Harvey was a main creditor of the mill. His son is one of the receivers. The Beaufort property included only as small wooden plant and nine tracts of land. The more valuable Kinston mill property of the company will be sold at Kinston.

Carrollton, Ga.—Stockholders of the Mandeville Mills held their annual meeting at their offices here. Reports from all officers were that all divisions were showing excellent profits, and that the directors recently had authorized purchase of considerable new equipment to take care of their rapidly expanding business.

Mandeville Mills operates two spinning mills at Carrollton with a total of 35,000 spindles, a fertilizer plant, and several cotton oil mills and ginneries in Carroll and adjacent counties.

The following were re-elected as the board of directors: W. J. Aldridge, J. A. Aycock, A. J. Baskin, T. W. Camp, J. G. Cheney, O. K. Henderson, R. D. Jackson, H. O. Lov-

vorn, J. A. Mandeville, W. O. Perry, and C. M. Tanner.

The directors met immediately afterward and re-elected the following officers: J. A. Mandeville, president and treasurer; H. O. Lovvorn, vice-president and manager, and W. J. Aldridge, secretary.

Belmont, N. C.—The plant of the Belmont Processing Company has been leased to the Aberfoyle Manufacturing Company, of Chester, Pa. Announcement to this effect by officers of the company, confirmed recent reports that the Aberfoyle Company would sell the output of the plant.

The Belmont Processing Company is controlled by the Lineberger-Stowe interests and produces mercerized yarns. Its output was sold for some time through Harding-Tilton Company, but more recently has been sold direct.

It is understood that the Aberfoyle Company will move additional mercerizing equipment from Chester to the plant here.

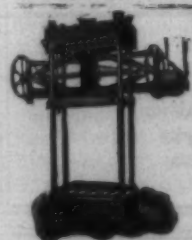
Fort Mill, S. C.—Colonel Leroy Springs, president of the Fort Mill Manufacturing Company, has given definite information of his plans for the enlargement and improvement of the plants.

His plans include the construction of a 12-inch water line to the Calawba river to secure a larger supply of water for the mills and for fire and other purposes. The system will be provided with filtering plants and will be adequate for the operation of a bleachery which will be constructed at an early date. Lockwood, Greene & Co. have been employed as engineers and the contract for the pipe line has been let.

The bleachery will be used for bleaching the product of the Fort Mill Manufacturing Company, and possibly also for the other mills under the management of Colonel Springs. George Fish, vice-president of the mills, will superintend the construction of the bleachery.

Capt. E. W. Springs has recently been made treasurer of the mills and E. Lee Skinner has been made superintendent.

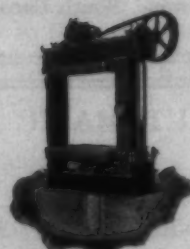
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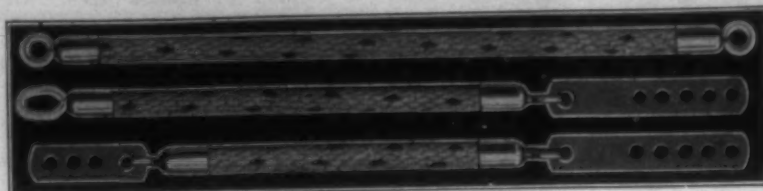
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The Matter of Making Money

Here's a hot weather story. A woman not long since visited a bond broker in a Kentucky city and bought a \$1,000 Liberty Bond. Some time later she called on the broker and said: "Our church is building a new Sunday school room, and I want you to make a \$50 contribution." The broker broker protested that he was kept rather busy contributing to the building fund of his own church.

"You should give to my fund because you made a thousand dollars off of me not long ago," said the woman.

"How come," asked the surprised broker.

"Why don't you remember I bought a Liberty Bond from you recently and paid you \$1,000 for it, in fact a little more than that?"

After assistant with an improvised pulmotor had brought the broker back to speaking acquaintance with the world, he patiently and politely drew a diagram in figures for his guest, showing her that his firm made about 52 cents, net, out of the thousand dollar transaction with her. Being a Kentucky woman, and therefore possessed of intelligence as well as charm, the customer-solicitor said:

"Honestly, I had not thought about that bond costing you anything!"

All of which is a reminder of the fact that many a member of the Well-Meaning Sons and Daughters of the League of Uplift look out of limousine windows into factory windows and drive on to their club room with "ideas." Some of them probably never think there is such a game in the world as Meeting-a-Pay-Roll. It is likely none of them knows that that out of 5,295 corporations in Kentucky making income tax reports in 1925 there were 1,877, or over 35 per cent, which were compelled to report no net income.—Bulletin of Associated Industries of Kentucky.

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New Yarn Code Affects Consumers

(Textile World)

APPROVAL of the Code of Carded Yarn Trade Practices voted at the meeting of the Cotton Yarn Merchants' Association, held July 8, at the Harvard Club, New York, represents the putting into immediate effect of drastic changes in the merchandising of cotton yarns. The association was unanimous in voting that the new code be put into effect at once. Therefore various stipulations of the code should be studied by both buyers and sellers of such yarns. The newly adopted code contains eight main provisions, several of which, now being in effect, will cause immediate changes in buying and selling of carded yarns of such importance that many in the trade believe they will completely change present methods.

Manufacturers in many instances

have not fully realized the extent the new code rules will change their own business and method of buying cotton yarns. One of the sentences of paragraph three of the code states, "It is not sound trade practice to share commissions either directly or indirectly with purchasers of yarns." The approval of this along with other stipulations of the code by practically every important yarn house in the country at the recent meeting will be particularly effective as applying to spinners and manufacturers. During recent years cutting of commissions by yarn dealers has become so general it has come to be regarded almost as a standard practice. It has, however, resulted in a condition to be deplored by both manufacturer and spinner as well as by dealers.

When a spinner did not confine his account to any one selling house, preferring to sell their output through any legitimate selling or-

ganization that sent them an inquiry, severe competition resulted on all inquiries sent to such spinners, which usually were given to a number of houses here. All of them would send the same inquiry to the spinner who would quote all inquirers the same price on the yarn. Such a condition resulted in cutting of commissions which would permit the dealer willing to cut the largest portion from the commission to book the order, houses quoting the spinners' price usually getting no results on such an inquiry. Manufacturers looked with no disfavor upon such a practice as it permitted them to buy in many instances at prices even lower than the spinner quoted. With adoption of the new code this practice is stopped and this change is important in itself to every buyer of carded yarn.

Clause eight of the code of trade practices, now effective, states, "The accumulation of stocks on the part

of commission merchants, being speculative in principle and consequently to the disadvantage of both producers and consumers, is unsound trade practice and should be eliminated by October 1, 1927." Yarn merchants' organization at their last meeting decided this clause should become effective immediately as it applies to additions to present dealers' yarn stocks. In other words no further additions to dealers' stocks can now be made and at the same time all commission houses and yarn merchants have agreed to have liquidated their present stocks by October 1, 1927. This paragraph of the code many believe will completely revolutionize the former method of merchandising carded yarn and the purchasing methods pursued by manufacturers.

With such a stipulation being enforced it means that hand-to-mouth buying of yarns, closely followed by practically every manufacturer dur-

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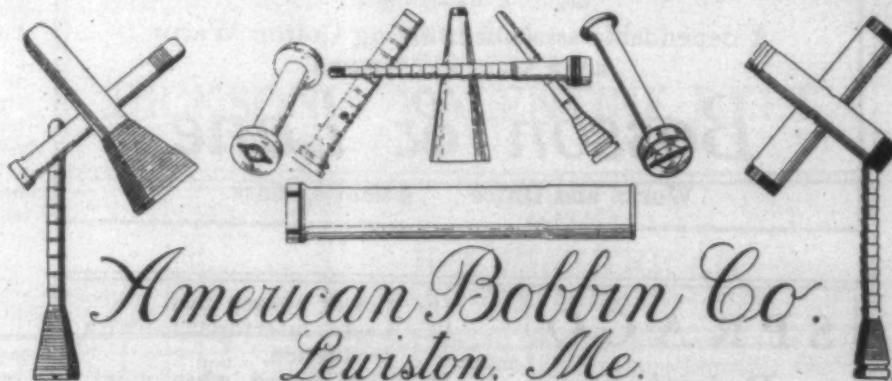
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ing recent years, will be seriously changed. This clause indicates after October 1, 1927, there will be no stocks of carded yarn carried in Philadelphia warehouses by dealers. Stocks of yarn will then have been cleaned out. In other words manufacturers will from that date on, assuming this clause to become effective, be compelled to carry their own yarn stocks in their own warehouses or else be content to accept delivery from the spinner, which may take from a week to two weeks, depending whether the spinner has the particular count in stock. In this connection attention should be called to the fact that a number of houses here have built up a reputation for carrying large stocks from which manufacturers could draw almost any count desired.

Manufacturers are looking upon this particular stipulation of the code with no little apprehension. What the effect of it will be on yarn merchants is not as important as what effect it will have upon their own manufacturing business, according to manufacturers, many of whom are wondering how they will be able to buy yarns ahead of requirements, as this clause in reality may mean, when their own customers are still buying in hand-to-mouth manner. Manufacturers have not been buying yarns on a hand-to-mouth basis simply because they like to, but according to a majority, mainly because their own customers were ordering in a like manner, ordering frequently and in small lots. With goods buyers adhering just as closely as ever to this manner of buying manufacturers in many instances have been wondering just how it will effect their business to be compelled to buy yarns ahead from the spinner, no longer being able to obtain yarn from dealers' stocks.

At present a manufacturer may call upon a number of different yarn houses here and order a bale or a case of yarn and this will be shipped, arriving at the manufacturer's plant the same day. To change this situation, which many manufacturers have come to depend upon and tell the manufacturer, as this clause of the code does, that from the date mentioned, they will no longer have advantage of that quick delivery service but instead must order all yarn, no matter how small the quantity, from the spinner's stocks, a week at least away, will mean a serious readjustment for manufacturers to face. What many in the trade, both yarn houses and manufacturers, regard as one of the most drastic changes in methods of merchandising yarns ever made. Yarn houses state in their opinion, relatively few manufacturers have fully considered the effect this change will have on their business.

The Advancing South

One of the clearest and most logical expressions that has been published recently regarding the industrial development in the South is a concise statement in Commerce and Finance, by Rogers Caldwell, of Nashville, Tenn., under the heading, "Why the South Leads in Industrial Expansion." Mr. Caldwell declares

that back of the present industrial expansion in the South lies the two fundamental requirements of all industrial development—raw material and power. Because the South has these in abundance, he declares, it has been able to lead the entire country in industrial development during recent years.

Mr. Caldwell agrees that "there are of course other elements, such as labor, climate and transportation, which have helped largely in this remarkable growth. Southern labor, both white and black, is practically 100 per cent native born and proved as to its ability to fulfill the requirements of stabilized industry. The climate of the South, so far as number of working days and atmospheric conditions are concerned, is probably better for the manufacturer than that of any other section of the country."

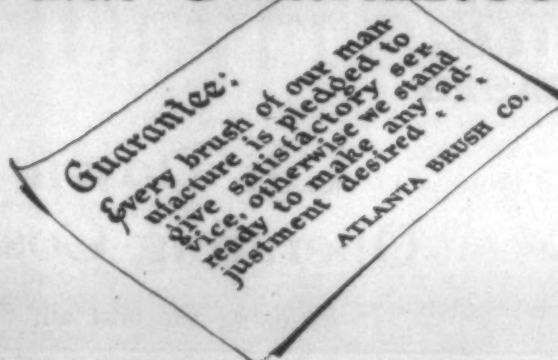
The writer is of the opinion that the South's prosperity always has been and always will be based upon its agricultural resources, nothing that practically every farm product that can be produced anywhere in the United States can be produced profitably in the South. "Producing virtually all of the nation's cotton and cottonseed oil, the South is now completing the cotton cycle by developing the cotton textile industry to the extent where it promises to soon become as thoroughly a Southern monopoly as the manufacture of cottonseed oil," declares Mr. Caldwell, explaining further that the development of Southern textile mills has been accelerated by the constant movement of mills from other parts of the country into this section to take advantage of the natural conditions which only Southern mills can enjoy. This is one statement in which Mr. Caldwell will not find general agreement. The trend of the textile industry unquestionably is toward the South and the advantages for the industry in the South are undoubtedly infinitely greater than they are in New England. There can be no sort of doubt, however, that the manufacture of fine goods and specialties will continue in New England and the East on a large scale.

Mr. Caldwell declares:

"Southern financial institutions, keeping pace with the industrial development of this section, are proving of major importance in the South's progress. Figures on 153 of the leading banks of this section show that in the year ended April 13, 1927, these banks had increased their total investments nearly \$30,000,000, while during the same period they reduced their borrowings at the Federal Reserve Banks nearly \$25,000,000. The three Federal Reserve banks in the South have shown a considerable gain within the past year.

"While the development of the South in the past decade has been the wonder of those familiar with it, it is easy to see that the future will witness a far greater industrial expansion in this section. This is true because it is evident that the industrial possibilities of the South have hardly been tapped as yet, and because the success of initial ventures in this direction will undoubtedly lead to much larger ventures in the future."—Charlotte Observer.

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Valuable Data on Yarn Spinning

(Continued from Page 18)

upper edge than the lower, will allow the fibers to rise up and come in contact with the first working flat. When setting the flats, it is best to bring them down on the gauge, and then back off until all the slack is taken up, such will prevent the cylinder and flats from coming in contact with each other. My settings for flats are 11-10-9, beginning at the back with 11. I believe in the gradual setting for flats, for this reason. When the stock arrives at the first flat it is in a more tangled state, and more impurities in it than there is when arrives at the last working flat, therefore to set the first as close as the last would fill up with more of the heavier trash and seed, and would not give the proper distribution for cleaning. Set doffer to a No. 7. Set doffer comb to a No. 7. However, the doffer should not be set so close that it will comb the seed from the doffer. Neither should be set so high on the doffer that the web will be strained before it is combed off. Set cylinder screen far enough away at front so that fibers that have not been transferred to the doffer, will not be knocked off in excess. Bat.

Number Forty-five

The subject Fine Points of Carding, is a very broad one, and only those who have had long experience can give anything like all the fine points about a card. Having had a number of years experience, I will offer a few points that I have found will give fair results.

To get good carding, the cards ought to be built on a solid floor so they do not have any vibration. The clothing should be selected for the kind of work you expect to do. The clothing should be pulled on at about 200 pounds pressure and left for twenty-four hours with the room at a temperature of about 85 degrees, and then taken off and pulled on again, cylinders at around 375 pounds, doffers at about 250 pounds, well driven up with a clothing hammer and tacked. When put on this tight, we can feel pretty sure of it not becoming loose and rising up.

Cards must be kept level to keep cylinders from rubbing arches. Keep all brushes in good order. Flat brushes must not be set too deep. If they are, they will only pack short fibres and foreign matter down in the clothing instead of brushing it out as it ought to do. Flat end brushes should be watched very closely and not be allowed to become packed with fly and stop revolving, if they do the ends of flats will become coated with grease and dirt, and you cannot get a smooth setting on flats. Flat chains must be kept reasonably tight. If they are not, the first four or five flats on back will not do any carding, and if every flat that is supposed to be at work is not working you are certainly not getting the results you ought to be getting.

As I said in the beginning, a card must be kept level, to insure a smooth running doffer, lick-in and cylinder. This will enable you to get a close setting, which is the most important work about a card. It is very important that the lick-ins be kept in good shape. The wire all straightened up and sharp.

Various things will cause lick-in to get in bad order. A cotton buckle, piece of cotton tie or mote knife get knocked up against it. When these things happen they must be looked after and remedied at once if you expect to get fine carding. Screen must be kept up. Sometimes a rib will get knocked out or broken while taking out flyings, or sometimes a bunch of strips will get in and knock out or bend a few ribs. When this happens it will affect the draft underneath the cards and you will not get fine carding. Screens and lick-ins should be examined every time the cards are ground. Cards should be ground every ten to fifteen working days. This depends lots upon the grade of cotton you are using, amount you are carding and opening and picking machinery you are using. I know of some places where they do not pay very much attention to picking and opening machinery, and then expect the cards to do it all. You cannot get fine carding this way. All heavy notes, seeds, gravel, etc., are supposed to be taken out in the opening and picking room, for this kind of foreign matter is too rough for card clothing to handle.

When a lick-in gets the wire bent over for say one-half inch or even a wider space wouldn't fool with trying to file this out for everybody knows that when you file the points off, the teeth are shorter and will cause the cotton to come in in strings or bunches. The best and only way to remedy a damaged lick-in is to put new wire on it, so you can get a close smooth setting.

Grinding and Burnishing.

When a card is to be ground, strip it out good, clean out all bunches from around cylinder and doffer, put on doffer belt, run in opposite direction from working. Brush both cylinder and doffer good with a clothing brush, then stop it off, put grinders on, pull them down to about a seven gauge at each end. By using a gauge before starting grinders will eliminate all doubt of damaging clothing by trying to set by sound only.

I am not a great believer in heavy grinding. When ground too heavy you will have a wire edge on the teeth and the card will not strip well. I think to grind eight hours reasonably heavy gets better results than six hours heavy. Keep good emery fillet on your grinders all the time. If this is allowed to become slick, you are only rubbing the clothing instead of grinding it. The flats should be ground at same time cylinder and doffer are. I find wonderful results in burnishing, especially where the vacuum

stripper is used. Burnishing keeps the teeth polished on the sides and hooks off of the points, and you will not have the clothing on flats, cylinder and doffer loaded with dirt, short fly, motes, seed, etc. The vacuum stripper is the best thing I know of to make a grinder keep his cards sharp. If they become faced it will not strip clean and he immediately sees the trouble. We must strip at least three times a day. Any less than three times under most any conditions the clothing will get too full and shed and you will have neps in your sliver.

Settings.

You cannot get the same results from same settings under all conditions. The following settings will give fair results under ordinary conditions: Licker-in screen at lip, .034; cylinder screen at back, .017; next two setting points, .034; front, 3-16-inch; back knife plate, bottom, .017; back knife plate, top .034. If this point is set too close the fibres will not rise up after leaving the licker-in, and the flats cannot get hold of them like they should.

The front knife plate governs the strips to a certain extent and will have to be set to suit the strips you want to take out. Mote knives, top .007; mote knives, bottom .005; licker-in from cylinder .007; feed plate to licker-in .007. I do not think we can set this point too close, for the licker-in is only a combing process, and the sooner it strikes the cotton, the more chances it has to clean it. Licker-in from cylinder .007; stripper comb from flats .012; doffer comb .012; flats all the way across .007; doffer to cylinder .005.

A card with the above settings with a cylinder speed of 165 to 175 r.p.m. well oiled and kept clean and carding around 65 to 75 pounds per ten hours on one inch middling cotton with a draft of about 125 ought to turn out good work. With a draft of 125 to 130 will give you lots cleaner work than 100 to 110 draft will, and just as good breaking strength.

"Andy"

(Continued Next Week)

Taxes Wipe Out Mill Profits

Boston, Mass.—Taxes paid by Massachusetts cotton mills have trebled since 1915 and when compared to cost of living are found to be twice as high as general level of prices, according to an analysis prepared by National Association of Cotton Manufacturers. Figures obtained from the South, the report declares, indicate that mills located in Piedmont or Carolina section of the South pay about four-sevenths as much as mills pay in Massachusetts. The mills in Alabama, Georgia and the far South pay about one-third as much.

Taxation practically wiped out the net income of the entire textile industry in the 13 most important textile States in 1924. The combined tax bill for the North and South that year amounted to \$71,755,2398, or 99 per cent of combined net income of \$72,418,980, according to National Industrial Conference Board. State and local taxes amounted to \$49,578,350, or 69.2 per cent, showing that money saved by reduction of Federal taxes has been absorbed by the steadily increasing State and local levies.

Massachusetts textile mills, in 1924, paid taxes amounting to 775 per cent more than the operating loss sustained by the mills. Taxation brought the total loss suffered in that year to \$29,147,843. All kinds of textile mills—wool, silk, knitting and cotton are included in these figures, but the cotton mills lost more than the others.

"Valuations placed on mills by assessors are above actual book values and do not represent the true market value of the mills," the report states. "Tremont & Suffolk mills and Hamilton Manufacturing Company of Lowell are striking examples of this point. The plants had a total assessment of more than \$9,450,000 and book values of \$8,181,726. When sold both brought only \$1,200,000.

"A decline has taken place in total assessments on mills in proportion to total assessments of the cities because mills have been forced out of business due partly to heavy taxation in competition with other mills in localities where taxes are about two-thirds less than Massachusetts mills pay.

"During the past several years cities such as Fall River and New Bedford have suffered heavy losses. At Fall River in 1920 cotton mills represented 58 per cent of the total city assessment and last year they represented but 40 per cent. In New Bedford in 1920, 47.3 per cent of the total city assessment was cotton mills and last year it was 39.3 per cent.

"Last year Massachusetts cotton mills paid nearly four times as much taxes on each spindle as was paid in 1896. The average rate per spindle in 1926 was \$.723 with a high figure of 1.08. In 1896 the rate was \$.198 and in 1915 it was \$.253.

A report of the National Industrial Conference Board on the income of, and taxes paid, by textile concerns in six Northern and seven Southern States for 1924, shows clearly to what degree the taxes paid out absorb the income of the mills of all kinds in this country. The total number of establishments in the North is 6233, in the South, 1013. Of Northern mills 3,549, or 57 per cent, reported a profit, in the South 457, or 45 per cent, showed a profit. The larger percentage of profitable concerns in the North is accounted for by the greater number of knitting and silk mills located in New York State which ran profitably in the poor year for cotton and woolen mills of 1924. In United States as a whole 6,836 mills, or 56 per cent, reported a profit in 1924.

Number of mills reported in the North is 6.15 times that reported in the South, but the combined income of the Northern mills is only 3.89 times the amount of the combined income of the South.

The FRONTIER DEVELOPS

FROM a cotton plantation crossroads less than ten years ago trace these steps in the development of one typical Piedmont Carolinas community.

First Plant In 1916 began making 80s single combed yarn. Today has 8,770 ring spindles and 4,352 twister spindles, producing 70s to 90s single and ply combed peeler yarns. Now has added 150 20-harness dobby looms, which weave the entire output of the plant and produce voiles and sateens and also include a specialty of shadow stripes sold to converters.

Second Plant In 1917 started production of coarse yarns but soon changed to combed peeler yarns. Now has 10,488 spindles manufacturing 40s to 60s single combed peeler yarns, cones and skeins.

Third Plant In 1920 was started to produce mercerized yarns, buying them either from the two mills above or from the outside. Later, bleaching and dyeing were added, and last year a thread department was put into operation.

Fourth Plant That same year (1920) a fourth plant started, producing gingham. Now also turning out rayon-filled goods. Has always concentrated on fast colors and recently has developed and successfully marketed a branded specialty.

Fifth Plant Established in 1922, this enterprise was started, a warp mercerizing plant owned by several out-of-town yarn mills which supplied the bulk of yarn mercerized. Now has become one of the important warp mercerizing plants of the South.

Sixth Plant Also established in 1922, made braided and woven rag rugs. Changing conditions have brought about installation of looms to make crinkled bedspreads and bedspread cloths.

Each of these enterprises has grown and developed. Naturally the community has grown and developed. Industry, and community life, each has contributed strength to the other.

There are many such communities in Piedmont Carolinas—each offering special and particular advantages.

Investigate. Find out what the opportunities are for you—for your business. *Our Industrial Department, Room 1104B, Mercantile Building, Charlotte, N. C., is at your service. Write.*

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Meeting of Textile Chemists and Colorists

A JOINT summer meeting of the Piedmont Section and the Southeastern Section of the American Association of Textile Chemists and Colorists was held at the George Vanderbilt Hotel at Asheville, N. C., on Saturday night, July 16th, and was very well attended.

An unusual feature of the meeting was a baseball game between the married men and the single men. Unfortunately it began to rain about one o'clock and when the players went to the baseball park the custodian would not allow them to play on account of the probable damage to the field.

It was decided to go to the baseball grounds of the Asheville Boys' School, which was in West Asheville, about ten miles away, but so many got lost that there were only fifteen players, two rooters, an umpire and a referee.

As the single men only had five present, the married men had to loan them two players.

The single men's team was Jas. Massarene, Harold Mahon (the owner of a uniform), Tom Nuchols, Chas. Ordway, Geo. Benedict, Joe Moore and —. Bowen.

The married men's team consisted of Roe Dorsett, Edgar Ford, Harry Bean, Malcomb McKenzie, Cliff Corley, Arthur Thompson, Jim Chalten and Walter Puckett.

The rooters were Jno. McNab and Noel White. Charlie Stone was umpire and David Clark referee. The duties of the referee were to overrule the umpire and to chase the balls that the catchers missed.

Three innings were played, during which many remarkable plays were made, including a new method of stopping a base runner, that is, by splashing muddy water in his eyes.

During the game one man was thrown out at first base and two balls were knocked out of the diamond.

The number of passed balls exceeded those stopped by the catcher.

There were some "has-been" ball players on both teams but they were outnumbered by the "never-wases."

Everybody had a good time, and as many prizes had been contributed by the mills, every player, both the rooters, the umpire and the referee received prizes.

One prize was found to have been lost and it was decided to award that to the umpire, Charlie Stone.

At 7:30 o'clock, the banquet was held at the George Vanderbilt Hotel with Prof. C. S. Doggett presiding.

David Clark, editor of the Southern Textile Bulletin, awarded the prizes, and a number of technical papers were read.

The program included "Dyeing and Finishing of Celanese," by T. C. King, superintendent of dyeing, bleaching and finishing at the Cramerton Mills Cramerton, N. C.; "The Manufacture of Sulfur Colors," by John L. Crist, general manager of the Beaver Chemical Corporation, Damascus, Va., and "The Uses of Hydrosulphite in the Textile Industry," by A. R. Thompson, Jr., Char-

lotte, N. C., Southern manager of Bohm & Haas.

As there was no registration of those present, the following list was made from those who drew for prizes:

A. F. Beane, Harry Bean, George Benedict, James Brown, H. Brown, Paul Bolen, J. R. Barker, M. M. Calhoun, Jim Chatham, David Clark, T. Clendinning, H. B. Constable, N. N. Crise, Cliff Corley, Prof. C. G. Doggett, Ben Dabbs, J. P. Daily, W. Davenport, D. A. Deviney, E. H. Dobbins, Roe Dorsett, Edgar Ford, A. J. Ghyster, J. M. Gregg, N. A. Gregg, W. H. Grier, John Hartley, C. B. Hayes, J. E. Hodge, John Holmes, L. M. Hood, L. N. Hood, H. J. Horne, M. T. Johnson, Tom Johnson, J. C. Love, J. E. Love, Malcomb McKenzie, John McNab, Harold Mahon, Jim Massarene, H. R. Mathewson, H. S. Miller, W. R. Mobley, Joe Moore, N. W. Moss, Roy Nanney, F. M. Noble, Tom Nuchols, H. W. Ormand, Chas. Ordway, C. H. Potter, Walter Puckett, S. C. Riley, E. E. Routh, J. G. Schaeffer, H. Schroeder, W. D. Shields, E. W. Smith, R. P. Smith, W. R. Smith, Charlie Stone, Arthur Thompson, A. G. Travis, Tom Taylor, W. R. Wells, Noel White, R. B. Young.

In addition to the above, the following whose initials were not given were also present: Bowen, Clark, Hennessey, Hunter, Laycock, Muddock, Moss, Remlen.

Textile Service Shop

Gastonia, N. C.—Gastonia's latest industry is the Thorpe Textile Service Shop, organized to handle the repair and upkeep of textile machinery and to manufacture certain articles and parts used in textile plants.

Among other things done will be steel roller work, gear cutting and spindle and flier construction. The company is in process of organization and a charter will be applied for within a few days.

Arthur Thorpe, organizer and manager of the company, has been connected for the past several years with the Loray division of the Manville-Jenckes Company here as a mechanic.

May Organize Bedspread Group

Following independent efforts by bedspread manufacturers to establish a basis for closer co-operation, it is understood that the Cotton-Textile Institute is now working on plans to organize mills making this class of goods into a group within the Institute.

One of the chief aims, it is reported, will be the standardization of sizes in the bedspread manufacturing industry, a subject which has been troubling the trade for many years. Eventually, it is believed that some plan can be evolved by which members of this group can exchange figures on production, sales and stocks of the different types of bedspreads being made, including damasks, crochets, plain crinkles, rayons and novelty cottons.

Textile Mill Power Problems

(Continued from Page 8)

ating on light loads, the efficiency an advantage in this respect. But where the current is generated in the mill and when the mill is operating the generator is low and it is not uncommon that more power is consumed with all-electric transmission than with all-mechanical transmission. Clutches assist in avoiding the old familiar countershaft drive, cross belts, tight and loose pulleys, and extra bearings. They reduce first cost, reduce space requirements, make transmission still more efficient and reduce belt troubles to the minimum. Thus in a plant having looms, where those looms are not in operation more than eight months of the year, the idle portion of the mill may be thrown out by means of a friction or other clutch.

The simplicity of belt driving is of course greatly in its favor. To the average man there is so much mystery connected with the use of electric motors that the purchaser is more or less helpless. Belts, pulleys, and shafts, are so much simpler than any user can make his own computations, and write his own specifications, if he will.

Most textile mills carry a supply of pulleys, shafts, and hangers in stock. The first cost of these materials being low, it is not expensive to keep them on hand. Then when a new machine is installed or a power line is to be extended, the work can be done by any mechanic, or can be superintended by him, and the new machinery put in operation in a very short time. Likewise when a belt needs replacing or lacing it is accomplished with comparative ease.

On the other hand, with electrical drives, unless the mill employs an electrical engineer, it is necessary to hire special assistance to install the wiring and motor. Outside of the large cities, electrical motors are generally secured with greater difficulty than shafts, pulleys, belting, and hangers.

The flexibility of the electric motor is also offset to some extent by its speed range limitations. The slower the speed of a motor the higher its cost and the lower its efficiency and power factor.

In the selection of electric motors we are usually restricted to a definite speed. If we want a different speed we are obliged to use a step-up or step-down belt arrangement. We must give consideration to the load characteristics. Does the machine start easily or with difficulty? The condition of the machinery, lubrication, kind of bearings, alignment, etc., must all be carefully weighed in order that the proper size motor will be selected. The motor must be capable of handling whatever load is required of it—peak load or valley load, long sustained normal loads, short peak loads and innumerable small loads. If peaks or overloads are of too great duration the motor will heat excessively and may burn out. In some modern installations, to prevent overheating, the motors are artificially cooled.

American Export and Credit Practice

(Continued from Page 7)

ufactured elsewhere. Manufacturers of cotton textiles are competing with producers of silks. This is true not only in the United States but in foreign countries. The improvement in the designs of cotton cloths over those turned out ten years ago is very noticeable.

In the manufacture of some cloths the United States already enjoys an enviable reputation. American voiles are everywhere in demand. In heavier goods, such as denims and drills and cheap plain fabrics or grey goods, mass production methods enable American manufacturers to counteract lower labor costs in other countries. American manufacturers pay higher wages, but they have lower unit costs by reason of the greater number of looms handled by operatives. The fear of lower costs abroad is greatly diminishing. This is largely due to the monthly comparative figures of the Bureau of Foreign and Domestic Commerce. These prove that in respect to certain standard cloth constructions, in spite of the higher wages paid, American lines are competitive with foreign goods. The printing and finishing costs, judged on a comparative basis, are not unfavorable from the American standpoint.

Another favorable factor is that, even under the mass-production system, it is possible for American manufacturers to supply many cloths suitable for foreign markets. When construction and pattern are susceptible to mass production, as they often are, volume can be obtained which meets price requirements. Market analysis and forecast are helpful in determining when and where this mass production will apply.

Extension of the American export trade is materially assisted by the work of the Bureau of Foreign and Domestic Commerce, under the direction of E. T. Packard, who is an experienced textile man. The Department has made many useful studies, particularly of the kinds of cloth in use throughout the world. Sometimes its work is augmented by the reports of Commercial Attaches and Trade Commissioners abroad. In other instances textile trade commissioners have been sent out to study and report on the situation in the foreign field. At the present time the Bureau contemplates sending abroad a number of commissioners on such work. Undoubtedly, the Bureau's efforts will be amplified and will prove increasingly valuable to our textile exporters.

The favorable financial position of the United States is another influence that should promote its export business. Under the old system it was customary for export commission-houses to grant credits abroad, either open or on a draft basis, settlements being made at definite periods, such as every six months. As the custom of direct selling developed was impressed on the industry. The result is that the same principles of credit investigation which have been famous in the

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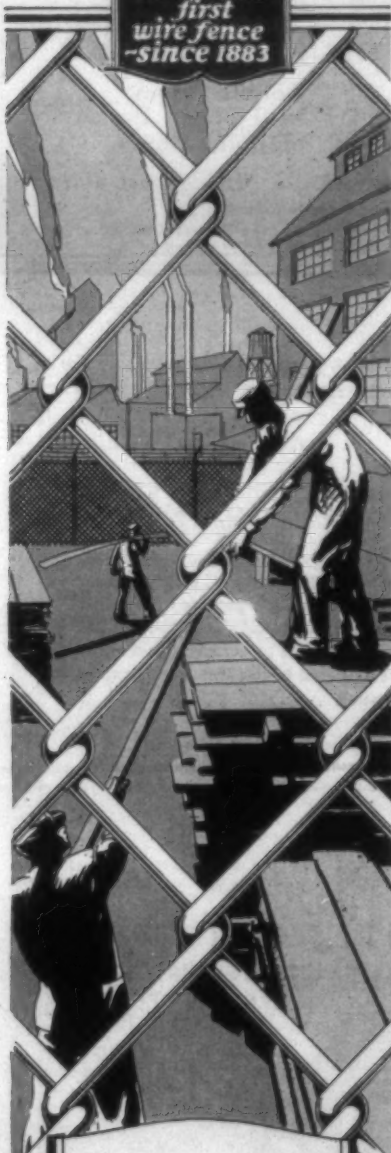


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home market during the past 25 years have been applied to the foreign field.

It is comparatively easy today for a responsible merchant in a foreign country to obtain credit in the United States. Textile houses sell on a 60, 90, or 120 day date or draft basis, even, at times, on a six months' open account basis. Occasionally interest is charged until the amount is back in the hands of the mill or its selling agent. There is a growing desire to sell goods on date draft instead of sight draft in order to fix definitely the date of payment.

In a number of countries del credere arrangements are made with local firms on the responsibility of reliable agents who will guarantee the account. The local agents, however, are required to supply full information of the standing of each firm. An investigation is made of the firm's habits of payment both in the United States and foreign countries. This is easily done through an exchange of ledger credit information, and foreign firms realize that complete frankness is the best policy. Foreign manufacturers are gradually realizing the value of an exchange of ledger experience. Almost without exception inquiries regarding a buyer, no matter in what country, are fully and freely answered.

Use of Advertising.

A wide and growing use is made of advertising and publicity in foreign countries to further the American export business. This takes the form of advertising in trade papers, export papers, and so on. In some cases local advertising is done abroad in co-operation with the local distributors. Considerable work is done to stimulate interest by means of circulars sent to retailers. Attention is also given to helping retailers move the goods. Window displays, posters, showcards, and similar printed material is furnished for that purpose.

Most foreign concerns, while working in a general way like American firms, have not gone in for such details as market analysis, forecasting, and other forms of market research. Their methods are much the same as far as local representatives and sending salesmen abroad are concerned.

There is hardly a textile manufacturer anywhere who does not realize that a new era has entered in the export field. New conditions prevail, new demands are encountered. Every alert manufacturer is watching the developments not only in his own country but in other countries. The textile situation, and particularly the export situation, is intensely interesting. In these days it never stands still. Appreciation of the currency, as in Italy, new labor regulations, as in Japan, and revolutionary conditions, as in China, all have their effect.

For many of the reasons outlined in this article the export outlook for the American textile industry is encouraging. To this may be added that there is a spirit of co-operation present today which should have beneficial results. The industry fully realizes the need for expansion of its export trade, and it is pulling

together in new ways that promise an improved position for it at home. An evidence of this fact is the recently organized Cotton-Textile Institute, which already represents 24 million spindles. It is through this organization, in co-operation with the Bureau of Foreign and Domestic Commerce, that intensive research of the textile markets of the world will probably be undertaken.

One of the surest means of taking up the slack represented by excess productive capacity in the United States would be doubling the export trade. When it is considered that such an achievement would mean the selling of only an additional \$75,000,000 worth of textile fabrics to the whole world, there is no good reason to believe that it is beyond the ability of American exports to accomplish. The sales methods applied at home will do the job abroad—when the industry really sets about using them as intensively abroad.

High Draft

(Continued from Page 12)

cotton, the difficulties are increased. My own experience did not induce me to lay out the capital as between one system and the other in coarser branches of the trade. From my own personal observations, I think the best results are obtained where double roving is used and brought to a coarser one according to counts spun, say, 6 hank double to a 3 hank double R. or 10 hank to a 5 hank.

Where attempts have been made to dispense with a roving frame, the results have not been good, it being generally admitted that dispensing with roving frames or even intermediate frames is not a commercial proposition.

Again, in the coarser branches of the trade the cost of the roving process (say 3 hank) does not exceed ¼d. per pound, while in 12 hank fine roving it might run into ¾d. to 1d. per pound, if you dispensed with the roving frames. Against this there must be considered the disadvantage of creel alterations, cost of changing to high drafting, increased cost in wages due to coarser hank prices, that is standard (3½ to 8) (3½ to 3, 5 per cent increase) below (3 hank, 10 per cent advance). Add to this also the fact, the change to a coarser hank and all it involves in creeling and doffing and dealing with more bulk, you practically convert a fine card room to a coarse one. Practical men know from experience what that means in producing quality yarns. The most advantage in my opinion can be obtained by adopting high drafting and converting from a single to a double roving and obtain the benefit of a better yarn from the same material.

We might now examine some of the points from the Continental reports.

These can be summarized as follows:—

- (1) Elimination of machinery, by spinning from a coarser hank roving.
- (2) Reduced power consumption due to above.
- (3) Allows of mixture of different lengths of staple: 20 to 36 from same

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mixing enables them to spin finer counts, and gives them a large range of counts, because with these devices fewer roving hanks are required.

(4) Can work long and short staples on the same frames. One has to remember that the cost of handling cotton on the Continent is very high and it is very doubtful if we should make two mixings with our choice of cotton close at hand, we should buy cheaper material or spin higher counts from same material. In my opinion, commercial competition debars us from considering the proposition. To buy cotton spin 40's and spin it down to 20's would be ridiculous only in special qualities.

Even the Continental spinners are not unanimous, as we find from their various reports.

Belgium reports little progress in high drafting. She has tried various systems, but adopted none only to the extent of 5 to 10 per cent.

Italy has tried many systems, but generally favors the three-roller system (about 35 per cent of spindles are using high draft.)

Spain has also tried many systems, but has generally adopted the Casa-blanca system. She reports 550,000 spindles or about 33 per cent.

Great Britain has tried every system, and at the present these are less than 400,000 spindles, or say about two per cent of ring spindles, or about .75 per cent of our total spinning spindles.

Holland. Many systems have been tried, but little progress in the adoption of high draft has been made. Reports somewhat varied and uncertain.

Another phase of this question should not be lost sight of, namely, that out of a world spindlage of 97,831,000 rings, Great Britain only claims 13,416,000 ring spindles, while we claim 43,870,000 mule spindles out of a world total of 65,141,000 spindles. This question of high draft principle, as previously mentioned, is universally employed for 20,000,000 spindles in this country; therefore, it can readily be seen that we have adopted it already in this branch of the trade.

The same principles apply in ring spinning as in mule spinning in regard to roller drafting. When you begin to deal in bulk, as in the coarse trade, whether it be mule or ring, weighting and control of rollers begins to play an important part in the satisfactory working.

Imagine spinning 12's counts from 2 hanks roving with self-weighted rollers or from ½ hank roving with high draft, and a practical demonstration of difficulties will soon appear to any experienced spinner.

I conscientiously believe the mule spun yarn as compared with the world spun ring yarn is the greatest asset we possess in the capture of the world trade as far as Lancashire is concerned. You may make a cheap cloth that is passable in times of stress, but to make a real British article of outstanding quality and finish you will have to come back to mule spun yarn.

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Spartanburg, S. C., Clinton Cotton Mills, Clinton, S. C., Hermitage Cotton Mills,
Camden, S. C., Mills Mill, Greenville, S. C., Osage Mfg. Co., Bessemer City, N. C.

Cotton Goods

New York.—Trading in cotton goods was more active during the week and some prices advances were noted. Manufacturers are expecting higher cotton prices and are trying to get goods prices on a parity with the advance in cotton. Higher prices were noted on denims and tickings and some of the other coarse colored goods. On print cloths and sheetings, prices were an eighth to a quarter of a cent higher.

There was good trading in print cloths, sales having been as large as production. In other lines, sales were not so large, but mills were busy on orders that will keep them occupied for some time to come. In fine and fancy goods sales were fairly large and orders during recent weeks have accounted for a large other domestics was reported during the week.

In print cloths there were contracts placed for deliveries to run through to the close of the year. The business was placed at the firmer prices which have become effective. On a few styles which remained unchanged substantial business led sellers to the point of quoting them higher. On a few constructions quotations are irregular. Mills are not quoting in a uniform way.

Deliveries to the close of the year were reported on 60x48s at 6½ cents and 64x60s at 7½ cents. There was good trading on 64x56s at 7½ cents and 72x76s at 8½ cents. The latter sold through August-September and August-October. September and also August brought 8½ cents and early September alone 8½ cents. Small sales of 80 squares were at 10¼ cents and 8.20-yard at 5½ cents. A good many August-September 27-inch 64x60s sold at 5½ cents and spots at the same figure.

The best selling sheeting construction was 40 squares 6.15-yard at 5½ cents for August-September with quick at the same price. Contracts on 37-inch 4-yard were placed at 8 cents and business was also done at 8½ cents. Trading on 31-inch 5-yard was at 6½ cents; 40-inch 4.25-yard 7½ cents; later 36-inch 6.50-yard 5½ cents; quick 56x60 4-yard 8½ cents; 36-inch 3.25-yard 9½ cents; 36-inch 4.70-yard quick 7½ cents. A good many 40-inch 2.85-yard sold at 10¼ cents with 10½ cents the lowest in the afternoon.

Sheetings were fairly active. There were indications of more interest from the bag trade and some substantial sales were put through. Inquiry was reported for September-October, on certain styles. Mills advanced prices one-eighth to a quarter of a cent in some instances. The general quotation on 31-inch, 48x48, 5.00 yard had become 6½ cents net. Business in 36-inch, 40x40, 6.15 yard at 5½ cents net; there were sales of 36-inch, 48x48 yard at 6½ cents net; most centers were asking 6½ cents on 36-inch, 48x40, 5.50, but there continued to be reports of even money. Contracts of 37-inch, 48x48, 4.00 yard sold at 8 cents net, with most centers later asking one-eighth and reports that some goods had sold at that price.

Coarse yarn colored goods business in some centers was somewhat better than the experience of the last two weeks, although generally of limited proportions. The cotton advance has stimulated some filling-in buying, but there are some mills so well sold ahead that they hardly look for any marked activity at this time. Others remark that their trade during the last two or three months, both jobbers and cutters-up, have been operating much more closely than they did earlier in the year and for this reason they believe that the prospects are for a normal fall business. One of the largest merchants, discussing this question, thought that price would not necessarily be the controlling influence, although he felt that further advances would be resisted.

The lack of responsiveness displayed by the carded broadcloths during the past week of stiffening prices in most print cloth yarn staples, is a reflection of the fact that many users continue to appear well taken care of on their requirements to the end of August. Efforts were made to stir up interest in later deliveries and while there have been some reports of trading, there have been no evidences of any important movement.

Cotton goods prices were quoted as follows:

Print cloths, 28-in., 64x64s..	6
Print cloths, 28-in., 64x60s..	5½
Print cloths, 27-in., 64x60s..	5½
Gray g'ds, 38½-in., 64x64s....	7½
Gray goods, 39-in., 68x72s....	8½
Brown sheetings, 3-yard.....	10½
Brown sheetings, 4-yard, 56	
x60	9½
Brown sheetings, stand.....	11½
Tickings, 8-oz.	19½a20½
Denims	16
Staple ginghams, 27-in.....	9
Kid finished cambrics.....	8 a 9
Dress ginghams	14½a16½
Standard prints	8



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The Yarn Market

Philadelphia, Pa.—Business in yarns showed some improvement during the latter part of the week. The larger business came from more frequent small orders rather than an increase in the size of individual orders. Buyers showed more interest and inquiry was very active. The price situation remained unchanged and spinners continue to hold firmly for quoted prices.

The best demand in carded yarns continued to be for the knitting numbers, weaving yarns continuing dull. Buyers showed willingness to pay full prices for yarns for prompt shipment but were unwilling to operate ahead on the present basis. Reports here indicate that most spinners are expecting higher cotton prices and do not believe that yarns are going lower at this time. Spinners refused some business calling for future shipment, as they do not consider it wise to sell far ahead at this time even when the opportunity presents. The majority of the mills have business on hand to keep them busy for several weeks ahead and while production continues large, stocks are not accumulating and most mills are in a comfortable position as far as the immediate outlook for business is concerned.

The situation in combed yarns showed little change during the week. Business was moderately active and prices were firm.

Prices on both mercerized and combed qualities are firm and unchanged. Combed yarns have advanced somewhat since the price change affecting mercerized yarns was announced. There has been some slowing up of specifications, quite noticeable at the present time on books, which were placed about the first of the year. It is said that this is largely due to the rearrangement of hosiery styles for fall showing and the consequent reluctance on the part of hosiery manufacturers to make up hosiery in volume amounts in anticipation of fall business. When this attitude on their part changes it is generally felt that business in this line will be very much better, and until this takes place the same lack of moving stocks will be noticed.

Southern Two-ply Skeins.	
8s	27 1/2
10s	29 1/2
12s	29 1/2
14s	30 1/2
16s	30 1/2
20s	32
26s	36
30s	38
40s*	47
40st	48 1/2
Southern Two-ply Warps.	
8s	28 1/2
10s	29 1/2
12s	29 1/2
14s	30
16s	31

18s	31 1/2
20s	32
24s	34
26s	36
30s	38
40s*	46 1/2

Southern Frame Spun Carded Yarn on Cones—Cotton Hosiery.

8s	28 1/2
10s	28 1/2
12s	29
14s	29 1/2
16s	31
18s	31 1/2
20s	32
22s	32 1/2
24s	32 1/2
26s	33
30s	34 1/2
40s	46

Southern Single Skeins.

4s-8s	28
10s	28 1/2
12s	29 1/2
14s	29 1/2
16s	30
18s	30 1/2
20s	31
22s	31 1/2
24s	34
30s	34 1/2
40s	44 1/2

Southern Single Warps.

4s-8s	28 1/2
10s	29 1/2
12s	29 1/2
14s	30 1/2
16s	31 1/2
18s	32 1/2
20s	32 1/2
24s	34 1/2
30s	36 1/2
40s	46 1/2

Carpet and Upholstery Yarn in Skeins.

8s to 3s 2-4-ply tinged tubes	23 a.
8s 3-ply hard white warp twist	25 1/2 a.
10s and 12s 3 and 4-ply hard white	25 1/2 a. 25
yarn, tubes and skeins	25 1/2 a. 26
Same, warp	26 1/2 a. 27 1/2

Southern Two-ply Comber Peeler Mercerizing.

8s-12s	44
20s	45
30s	49
36s	54
38s	56
40s	57
50s	59
60s	68
70s	78
80s	91

Southern Two-ply Hard Twist Combed Peeler Weaving Yarns.

8s-12s	40 1/2
10s	42 1/2
30s	47 1/2
36s	52 1/2
40s	54 1/2
50s	55 1/2
60s	57 1/2
70s	77 1/2
80s	86 1/2

Two-ply Mercerized Yarn.

20s	62
30s	66
40s	71
50s	78
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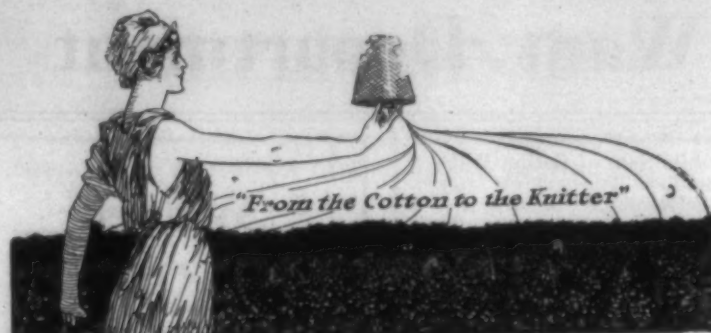
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WANT position in Piedmont section as mill office stenographer and general office work. Experienced. Good reference. Am a lady 23 years of age. No. 5222.

WANT position as overseer weaving. Overseer 10 years. I. C. S. diploma. Want to locate in North or South Carolina. 34 years old. Married. No. 5223.

WANT position as overseer weaving on plain or corded goods. 20 years experience. Best of references. No. 5224.

WANT position as overseer weaving. Experienced and competent. Good references. No. 5225.

WANT position as spinner. Familiar with carded and combed yarns, coarse and fine yarns. 16 years overseer. Best references. No. 5226.

WANT position as carder, spinner, or superintendent of same. References on request. No. 5227.

WANT office position—bookkeeper, time keeper, shipping clerk, or receiving clerk. No. 5228.

WANT position as dyer. 10 years experience on raw stock and skeins. Married and now employed. Address T. S. No. 5229.

WANT position as superintendent. 20 years experience white and colored work. Now employed. Carolinas preferred. No. 5230.

WANT position as assistant superintendent or overseer spinning. Age 35. Employed but want better location. Best of references. No. 5231.

WANT position as overseer carding or superintendent of yarn mill. Can make quick change, and give best of references. No. 5232.

WANT position as overseer small or second hand in larger fancy weaving department. 18 years weaving experience—6 years second hand. Good references. No. 5233.

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WANT position as superintendent, or any department in mill. 10 years experience fancy and plain goods. Graduate Bowlin College. Good references. No. 5235.

WANT position as superintendent or will take any department in a large mill. Expert on fancy weaves, all makes of looms. North Carolina preferred. Best references. No. 5236.

WANT position as carder and spinner, or superintendent. Experienced. References. No. 5237.

WANT cloth room. 23 years with one company; 18 years in cloth room, four years as overseer. Experienced on sheetings, prints, lawns. No. 5238.

WANT position as cloth room overseer or finisher. 20 years experience. References. No. 5239.

WANT position as overseer spinning. Large plant. 15 years experience. 28 years old. Good references. No. 5240.

WANT position as superintendent or overseer weaving. Expert on cord fabrics. I. C. S. diploma. 36 years old. No. 5241.

WANT position as overseer weaving, slashing, spooling, warping. Plain or fancies, white or colored. References. No. 5242.

WANT position as carder, spinner or outside man. Prefer outside. Experienced and the best of references as to character and ability. No. 5243.

WANT position as manager or agent. Many years experience in both yarn and weave mills. Good character, loyal and efficient. No. 5200.

WANT position as overseer spinning in Texas, Ark., La. or Miss. 40 years of age. 20 years experience. Can handle small or large room. No. 5201.

WANT position as Superintendent or overseer weaving; can handle auto fabrics or plain goods. Would consider a good yarn mill. No. 5202.

WANTED by young man 21 years old with good references, position in mill office. Completed High School and the Georgia College of Commerce. Good stenographer and familiar with adding machine. No. 5203.

WANT position as superintendent, overseer carding or overseer spinning. References to anyone interested. No. 5204.

WANT position as overseer carding. 21 years experience on all kinds of work. No. 5205.

WANT position as overseer weaving. Experienced and competent. No. 5206.

WANT position as agent, superintendent or manager, anywhere. No. 5207.

WANT position as overseer carding, spinning, or spooling, twisting and warping. Can give the best of reference. No. 5208.

WANT position as superintendent, or as overseer weaving in a large mill. Best of references. No. 5209.

WANT position as overseer weaving. 10 years experience on plain and fancies, cotton or silk. Familiar with Draper, Stafford and Crompton & Knowles looms. Guarantee satisfaction. No. 5201.

WANT position as overseer weaving, wide and narrow sheetings, drills, satens or wrinkled bedspreads. 18 years experience in weaving, warping and slashing. No. 5211.

WANT position as overseer cloth room. 20 years experience. Good references. Married and strictly sober. Can change on short notice. No. 5212.

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WANT position as overseer carding, large mill. Fully acquainted with combed and carded work. Best of references. No. 5214.

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WANT position as overseer carding. In present position 5 years. Personal reasons for wishing to change. Best of references. No. 5218.

WANT position as superintendent, overseer spinning or overseer weaving. Can handle 2,500 looms and slashing in any mill. References. No. 5219.

WANT position as cashier, bookkeeper or other clerical work in mill office. Good stenographer, typist and correspondent. A willing worker. 9 years experience. No. 5220.

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Charles Bond Company
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- Belting (Link)—**
Charles Bond Company
Link-Belt Co.
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- Bicarbonate of Soda—**
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- Chain Belts and Drives—**
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- Chemicals—**
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—See Dyeing, Drying, Bleaching and Finishing
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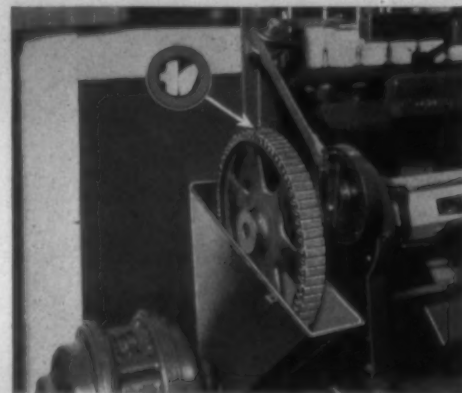
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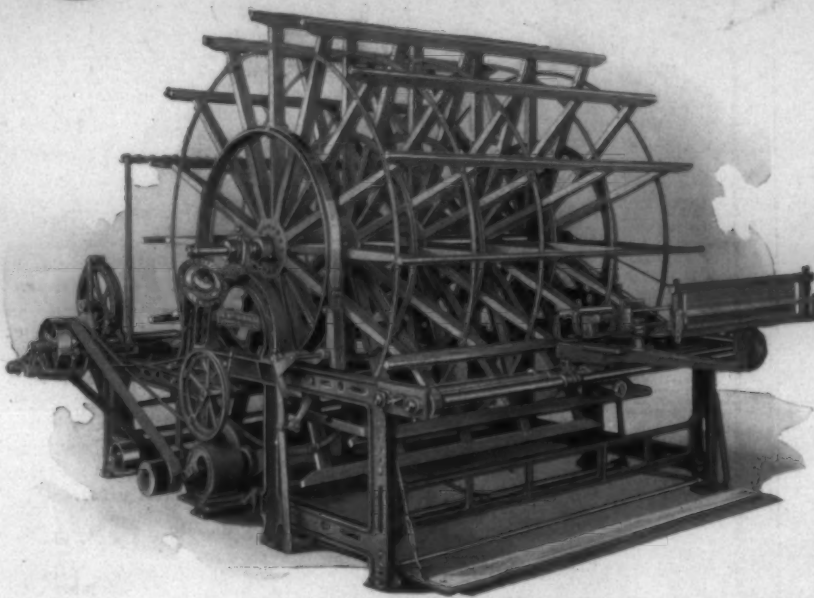
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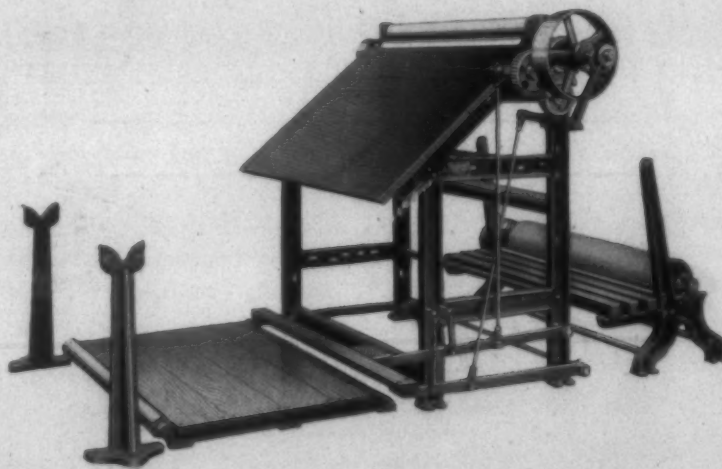
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